



CONGRESS PROCEEDINGS

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Post-partum acute kidney injury : experience of the nephrology department of the university hospital Ibn Sina

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Objective : The aim of our study was to evaluate the clinical and biological characteristics, the etiological profile and the prognosis of post-partum acute kidney injury (AKI) and to identify risk factors associated with fetal death and poor renal prognosis. **Materials and methods:** This was a 15 years retrospective study conducted in the Nephrology-Dialysis department of the university hospital Ibn Sina, Rabat. We reviewed medical records of patients with a diagnosis of post-partum AKI to identify the causes therapeutic methods used. We defined a favorable outcome complete renal recovery with a live baby and adverse outcome as the absence of renal recovery and/or maternal death and/or fetal loss. **Results:** We collected 37 cases of postpartum AKF. The average age was 30.2 +/- 7.4 years. The average length of gestation was 38.8 +/- 1.3 weeks of amenorrhea. Prenatal care was effective in 75% of cases. Childbirth was medicalized in 92 % of cases and 75% were vaginal deliveries. High blood pressure, oedema and oligoanuria were the main clinical features. The mean serum creatinine at 54 +/- 30 mg/l. All patients were in stage Fof RIFLE classification and the main causes of AKI were: pre-eclampsia-eclampsia (56.8%), hemorrhagic shock (37.8%) and sepsis (18.9%). Renal biopsy was carried out in 18.9% of cases. Hemodialysis was required in 59.5% with pulmonary edema and electrolyte disorders constituting the main indications. Renal recovery was complete in 56.8% of cases, partial recovery in 13.5% and 16.2% had end-stage. There were 2 cases of maternal death and 3 cases of maternal blindness. Fetal mortality was 48.7%. Risk factors for poor renal outcomes were: AKI RIFLE stage L or E, cortical necrosis and fetal death. Preeclampsia, hemorrhagic shock and classes L and E RIFLE were associated with foetal deaths. **Conclusion:** Our study highlights the need for close monitoring of pregnancy and a systematic and regular screening for infections, proteinuria and hypertension.

Acute kidney injury following invitro fertilization; an uncommon complication of a rapidly growing assisted reproductive technique in Nigeria- case report

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Objective: The objective of this report is to highlight an unusual but possible occurrence of AKI during a rapidly growing assisted reproductive procedure, and its successful management. **Methodology:** A 22 year old lady who was an oocyte donor in an IVF procedure. She was not hypertensive or diabetic and had no family or past medical history of renal disease. She had stimulation of the ovaries with gonadotrophins and successful harvest of the oocyte. Two days later she developed abdominal distension and breathlessness and was found to have low blood pressure and ascites. Abdominal ultrasound showed ascites and massive ovarian cystic enlargement. The kidney function test showed an increase in serum creatinine from baseline 0.8mg/dl to 1.7mg/dl. She was successfully managed with albumin infusion and vassopressor agents. **Conclusion:** Acute kidney injury can occur in a wide range of medical specialties. Clinical vigilance will improve outcome.

Acute kidney injury in elderly patients in saint-louis: a retrospective study in 2015

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Objective: The aim of which is to determine the epidemiological, clinical, biological, therapeutic and prognostic profile in this particular population. **Patients and Methods:** In a prospective study, we included patients aged ≥ 60 years, hospitalized in nephrology department at Saint-Louis Regional Hospital, from March 1st 2015 to August 31st 2015. Acute kidney injury (AKI) was defined according to the Kidney Disease Improving Global Outcomes [2] criteria: The data collected was entered and analyzed with MSEXCEL 2010. **Results:** Prevalence of AKI in the elderly was 29,5%. The mean age was 70.9 years [60-88 years] and the age group 60-70 was more represented (50%). The sex ratio was 3.5. Fifty percent had a history of hypertension. The dominant functional signs were dyspnea and disorders of consciousness (27.8%). Mean serum creatinine level was 60.3 mg / l [15 - 148.6mg / l] and mean blood urea was 1.03 g / l [0.63 g / l - 1.92 g / l]. Anemia was present in 50% of cases, with an average Hb level of 9.9 g/dl. Patients were classified according to the classification of RIFLE: class R (Risk) was 16.70%, class I (Injury) 27.80%, class F (Failure) 55.60%. AKI was functional in (61.1%), obstructive in (27.8%) and organic in (11.1%). The following measures were instituted: Rehydration in (55.6%), antibiotic therapy in (50%). The progression was favorable in (61.1%), with a recovery of the renal function: mean serum creatinine at the outlet was 11.35mg / l. Hospitalization duration varied from 3 to 18 days. The evolution was unfavorable in (38.9%), including a partial recovery in (11.1%). Mean serum creatinine in the partial recovery ranged from [18.16 to 23.65 mg / l]. The average hospital stay was between 6 and 21 days. However, we deplored 5 deaths (27.8%). The causes of death in our patients were cardiac arrest, probably related to a history of cardiovascular disease, a stroke, a tumor of the uterus, a case of sepsis, a case of severe malaria. **Conclusion:** AKI is common among seniors in the Saint-Louis Regional Hospital. Early diagnosis and management is necessary to reduce morbidity and mortality responsible for poor prognosis. **Key words:** acute kidney injury, elderly, prevalence, Saint-Louis.

The prevalence and predictors of Acute kidney injury in women with complicated pregnancies in tertiary Obstetrics Units in Yaounde, Cameroon

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Objective: The aim of this study was to determine the prevalence and predictors of AKI in women with complicated pregnancies. **Methods:** We conducted a cross-sectional study from April 6 to September 6, 2015 in 2 Obstetrics units of Yaounde. All consenting pregnant or post-partum women with complicated pregnancy were enrolled. Patients with a prior diagnosis of chronic kidney disease were excluded. Complications of pregnancy considered were: post abortum/puerperal sepsis, preeclampsia/eclampsia(PEE), and pregnancy-related hemorrhage. We measured serum creatinine on identification of the complication, at 48 hours, and on day 7. AKI was defined using the modified KDIGO criteria. We used logistic regression modelling to identify associated factors. A p value<0.05 was considered statistically significant. We obtained approval from the ethics board of the hospitals involved. **Results:** A total of 173 women, mean age of 28.04 ± 6.74 years and parity of 2.0 ± 1.7 were enrolled. 5.2% were HIV positive and 1.7% known hypertensives. 72.8% of participants were in the 3rd trimester or post-partum period and 46.2 % had done the minimum recommended prenatal consultations. Third trimester/postpartum hemorrhage (n= 84), PEE (n= 72), sepsis (n= 22), and clandestine abortions(n=16) were the main risk factors of AKI. The prevalence of AKI was 38.2 % (n=66), with 27% in AKI stage 3. PEE, puerperal/post-abortum sepsis, and postpartum hemorrhage were the main etiologies of AKI. Sepsis (p = 0.000), HELLP syndrome (p = 0.000), blood pressure $\geq 140 / 90$ mmHg (p = 0.038), and delay in management of pregnancy complication (p = 0.020) were risk factors of AKI identified. **Conclusion:** AKI is frequent among women with complicated pregnancies in our setting. Early recognition and treatment of risk factors may reduce this burden.

Clinical and biological profile of patients with malaria induced acute kidney injury at the Buea hemodialysis center

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Objective: To assess the clinical and biological profile of patients with Malaria Induced Acute Kidney Injury

Methods: This retrospective cross-sectional descriptive study covered a period from November 2011 to September 2014. We included all patients seen with acute kidney injury plus a positive thick blood film for plasmodium or suggestive symptoms and a positive rapid diagnostic test at presentation at the Buea Regional Hemodialysis Center. We describe their clinical and biological findings. The study was approved by the ethical board of the SW regional delegation for public health. **Results:** A total of 13 patients were seen with acute kidney injury attributed to malaria. 5 (38.46%) were male. The mean age was 38.69 ± 19.5 years. The most common symptoms at presentation included fever (100%), asthenia (100%), headaches (84.62%) and joint pains (84.62%). During the course of follow-up, the most common systems involved were musculoskeletal (84.62%), hematologic (76.92%), genitourinary (76.92%), gastrointestinal (69.23%), neurologic (38.46%), and respiratory (23.08%). Fluid overload was present in 61.54% of patients. All patients had falciparum malaria with median trophozoite count of 14103 trophozoites per ml (5551 - 42870). The median serum creatinine was 87mg/L (44 - 138). Majority of patients had severe anemia (61.54%, Hb<7.9g/dL). Urine dipstix anomalies included proteinuria (83.33%), leucocyturia (75%), hematuria (41.66%) and glucosuria (8.33%). Co-morbid conditions included HIV (53.85%) hypertension (15.38%) and diabetes (15.38%). 7 patients (53.85%) received dialysis in addition to anti-malarial therapy. One case of death was recorded and the others recovered renal function (92.31%).

Conclusion: In our series of patients with malaria induced acute kidney injury, fever and asthenia were constant findings. Most patients present with severe anemia and proteinuria was the most common dipstix anomaly. Hemodialysis was a frequent modality of treatment. **Key words:** malaria, acute kidney injury, Buea, Cameroon

Pattern, clinical characteristics and outcome of renal failure in elderly patients seen in a tertiary hospital in south-east Nigeria

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Objective: To determine the clinical pattern of presentation and management outcomes in our elderly renal failure population over a 3-year period **Methods:** A review of case records of patients aged 60 years and above who had acute or chronic renal failure and managed in the hospital. Data on clinical presentation, major causes, management and survival were collated. Data was analyzed using SPSS version 20.0 **Results:** Complete data was available for 105 patients. The age range was 60-92 years with near equal gender distribution. Main presenting complaints were generalized body weakness and anorexia. At initial presentation, 81.9% had acute renal failure (53.3% had an acute on chronic kidney disease, 28.6% had an acute renal failure) while 18.1% had end-stage renal disease. Sepsis (33.3%), bladder outlet obstruction (17%) and nephrotoxins (16%) were the leading causes/precipitants of acute renal failure while diabetes (31.4%), hypertension (21%) and obstructive nephropathy (18.1%) were the main causes of ESRD. 63% of patients with acute renal failure could afford and underwent haemodialysis and, among these, 48% were discharged alive while 52% were recorded dead. Only one patient with ESRD underwent renal transplantation; among the others, 71% continued with haemodialysis while 29% were managed conservatively. Median duration of survival for all patients with ESRD was 6 weeks (0-28 months). **Conclusion:** Sepsis is the leading cause and precipitant of acute renal failure in elderly while diabetes is the main cause of ESRD. Survival is poor among the elderly patients studied.

Comparative study of acute kidney injury in young versus elderly patients in an Internal medicine department in Abidjan (côte d'ivoire).

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Objectives : To compare the profile of AKI between the young and the elderly patients. **Patients and Methods:** This was a prospective study carried out from January 2010 to December 2015 in the department of Nephrology-Internal Medicine D of the University Hospital of Treichville. The diagnosis of AKI was retained according to KDIGO criteria. Age ≤ 35 years was considered young and ≥ 60 years as elderly. **Results:** We collected 214 cases of AKI, with 106 young and 108 elderly. The proportion of males was 51.9% in the young patients against 77.8% in the elderly patients ($p = 0.0001$). The proportion of hypertension and diabetes in the elderly patients, respectively 30.6% and 36.1% was statistically higher than in the young patients ($p = 0.0001$). However, HIV infection was more prevalent in the young patients ($p = 0.0001$). Anemia was observed in 84.9% in the young patients against 58.3% in the elderly patients ($p = 0.0001$). It was severe in 34% among the young patients against 15.7% among the elderly patients ($p = 0.002$). The proportion of drug-induced AKI was 17% in the young patients against 2.8% in the elderly patients ($p = 0.0001$). Malignant hypertension ($p = 0.002$) and urinary tract tumors ($p = 0.0001$) were more observed in the elderly patients. Mortality was 31.1% in the young patients against 47.2% in the elderly patients ($p = 0.011$). **Conclusion:** The etiologies are the same with different proportions, except malignant hypertension observed only in the elderly patients. Mortality is higher in the elderly patients. **Keywords :** acute kidney injury, elderly patient, young patient, infection.

Prevalence and factors associated with renal impairment amongst medical admissions in two district hospitals in Kumba

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Objective: To determine the prevalence and factors associated with renal impairment and evaluate the proportion of missed diagnosis in two district hospitals in Kumba. **Methods:** We conducted a cross-sectional analytic study from 8th of January to 8th of March 2016. All consenting adult medical admissions in the Kumba District (KDH) and Presbyterian General Hospitals were eligible. Patients with confounders for serum creatinine or pregnancy were excluded. Serum creatinine assay was done within 48 hours of admission in the KDH laboratory. Renal impairment was defined as serum creatinine $> 1.4\text{mg/dl}$ for males and $> 1.1\text{mg/dl}$ for females. Missed diagnosis was defined as renal impairment in a patient for whom the treating physician did not request serum creatinine. The study was approved by The Institutional Ethics Committee for Research on Human Health of the University of Douala. **Results:** All 274 (43.1% males) of the 296 eligible participants were included. Mean age was 49.9 (range: 19-94) years. HIV ($n=88$; 32.1%), hypertension ($n=61$; 22.3%) and diabetes ($n=55$; 20.1%) were the major comorbidities. Non-tuberculosis chest infections ($n=65$; 21.2%), malaria ($n=54$; 17.6%), diabetes-related complications ($n=27$; 8.8%), acute complications of hypertension ($n=26$; 8.5%), enterocolitis ($n=23$; 7.5%) and decompensated heart failure ($n=13$; 4.2%) were the main working clinical diagnosis. The prevalence of RI was 39.8% ($n=109$), with the diagnosis missed in 70.6% ($n=77$) of cases. Hypertension ($P=0.012$; OR=2.27, 95%CI, 1.96-4.32), Complementary and alternative medicine use ($P<0.0001$; OR=2.70, 95%CI, 1.6-4.56), haemoglobin $\leq 8\text{g/dl}$ ($P=0.022$; OR=2.15, 95%CI, 1.12-4.16) were independently associated with RI. **Conclusion:** There is a high prevalence of renal impairment amongst medical admissions in Kumba district hospitals. Despite the high frequency of renal risk factors diagnosis is missed in most of them. Both physician and patient-directed measures are needed to reduce the prevalence. **Key words:** Renal impairment, medical admissions, missed diagnosis, prevalence, associated factors.

Diagnostic performance of novel biomarkers of acute kidney injury: case of contrast induced nephropathy

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Objective: The aim of this study was to compare the performance of different novel biomarkers of acute kidney injury. **Methods:** This prospective study was conducted over a period of six months in the Radiology and Imagery department the Douala General Hospital in Cameroon. Ethical clearance and research authorization were gotten before. Consenting patients with a prescription of a radiological exam with the use of contrast product were included. Blood and urine samples were collected before, four and forty-eight hours after contrast media exposure. Creatinine was measure in blood while novel biomarkers were measure in both blood and urine. Creatininemia was measured in the biochemistry laboratory of the Douala General Hospital and analysis of biomarkers was performed in the Immunology Laboratory of the Biotechnology Center of University of Yaoundé I. **Results:** A total of 11 patients were included in our study. Ages ranged from 28 to 83 years. Abdominal CT scan was the most requested exam (6/11). Base on serum creatinine 4/11 patients developed contrast induced nephropathy, 9/11 with urinary NGAL and urinary cystatin C, 7/11 with cystatin C. In terms of performance, and using creatinine as gold standard, the area under curve of sCystatine C, uCystatine C sNGAL and uNGAL were 0.71; 0.46; 0.43 and 0.2 respectively. **Conclusion:** This pilot study shows that, NGAL and cystatine C diagnoses most case of CIN than creatinine. Serum cystatin C was the excellent biomarker in the diagnosis of contrast induced nephropathy. The kinetics of serum NGAL and cystatin C could help show the evolution towards contrast induced nephropathy.

Performance and cut-offs of three glomerular filtration rate estimation equations in a Cameroonian population with chronic kidney disease

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Objective: To evaluate the performance of the Modification of Diet in Renal Disease (MDRD), Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) and Cockcroft–Gault (CG) equations against creatinine clearance (CrCl) to diagnose end-stage renal disease in patients with Chronic Kidney Disease (CKD). **Methods:** Consenting non-dialyzed CKD patients in KDIGO stages 3-5 who consulted at the nephrology out-patient unit of the Yaounde General Hospital (YGH), from 1st November 2013 to 31st March 2014 were enrolled. Patients with debilitating illnesses and incomplete 24 hour urine collection were excluded. We measured CrCl from 24-hour urine collection used the average CrCl from two consecutive measurements was noted. Serum creatinine assay was performed by enzymatic method. Agreement between measured and estimated GFR was evaluate using Bland Altman analysis and Kappa statistic. We used receiver operating curves (ROC) to determine the best cut-off of eGFR to diagnose ESRD. End-stage renal disease was difined as CrCl < 15 ml/min. **Results:** The three equations had a good accuracy for diagnosing CrCl-based ESRD with c-statistics ranging from 0.97 to 0.98. Bias was 3.24 for CKD-EPI, 5.17 for MDRD, and 5.76 for CG. Best cut-off of serum creatinine for diagnosis of CrCl-based ESRD was 16.25 mg/l (Se = 0.93; Sp = 0.92) for CKD-EPI, 18 mg/l (Se = 0.93; Sp = 0.92) for MDRD and 16.8 mg/l (Se = 0.93; Sp = 0.85) for CG. Using these cut-offs, the agreement with CrCl was almost perfect for CKD-EPI (kappa = 0.852) and MDRD (kappa = 0.852), but moderate for CG (kappa = 0.78). The number of patients diagnosed with ESRD were 11(40.7%) for CKD-EPI, 10(37%) for MDRD, 9(33.3%) for CG and 10(37%) for measured CrCl. **Conclusion:** CG equation underestimates the frequency of end-stage renal disease in the Cameroonian population. CKD-EPI equation should be preferred in patients with CKD in this context. Further studies using more robust measures of GFR than CrCl are needed.

Cardio-renal syndrome in hospitals at Parakou (Bénin): prevalence and factors associated

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Objective: To study the prevalence and factors associated with cardio-renal syndrome in hospitals at Parakou. **Materials and methods:** He acted in a descriptive cross-sectional study and analytical conducted from March 1st to June 30th 2016, concerned all patients which identified at least 15 years, received and monitored in the Cardiology and Nephrology departments of the University Hospital of Borgou and the Army Training Hospital of Parakou for cardiac failure and kidney injury. A systematic recruitment of all admitted patients was made. The CRS has been defined according to international standards. The factors were investigated in subjects using a questionnaire that provided epidemiological, clinical and paraclinic data. The data were analyzed in Epi-info and the chi2 test was used to compare the proportions with a statistically significant difference for $p < 0.05$. **Results:** Of the 275 patients admitted, in the two hospitals during the study period, 107 had the cardio-renal syndrome (CRS), an overall prevalence of 38.90%. The mean age of the patients was 55.50 ± 15.11 years (range 20-93 years). The sex ratio was 1.97. Of the patients, 80.37% have a history of high blood pressure and 39.25% have a history of diabetes. The CRS was significantly associated with male sex ($p = 0.001$), high blood pressure ($p = 0.02$), diabetes ($p = 0.01$), anemia ($p = 0.001$), hyperuricemia ($p = 0.03$), and hypertriglyceridemia ($p = 0.009$). **Conclusion:** The prevalence of CRS and the risk factors are important. Better prevention of risk factors contribute to reduce morbidity and mortality due to CRS. **Key words:** Cardio-renal syndrome, prevalence, associated factors.

Nephrotic syndrome in the senegalese elderly: epidemiological, etiological, therapeutic and prognostic profile

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Objective: In sub-Saharan Africa, the nephrotic syndrome in the elderly remains little discussed in the literature. The objectives of this study were to establish the epidemiological profile of elderly patients with NS, to identify their etiologies and to evaluate their treatment and evolution. **Patients and Methods:** This was a retrospective, descriptive and analytical study of subjects over 60 years old, consulted or hospitalized in the nephrology department of the Aristide Le Dantec University Hospital from 2009 to 2013, and in whom the diagnosis of nephrotic syndrome had been retained. **Results:** Forty (40) cases were collected with a hospital prevalence of 3.87% among subjects over 60 years of age. The mean age was 65.67 ± 6.2 years. There were 30 men and 10 women with a sex ratio of 3. Renal edema, proteinuria and renal insufficiency (RI) were the main reasons for consultation and / or hospitalization, respectively, in 72.5%, 45%, and 42.5 % of cases. Extra-renal signs were present in 20% of patients. Mean proteinuria was 5.53 ± 3.65 g / 24h. RI was present in 77.5% of the cases. The mean GFR was 39.07 ± 17.9 ml/min/1.73m². Mean protidemia was 57.17 ± 9.2 g/l and mean albumin level was 21.74 ± 5.3 g/l. Hypercholesterolemia was present in ten patients (62.5%). NS was impure in 95% of patients. Renal biopsy was performed in 50% of patients. Histologically, lesions were dominated by membranous glomerulonephritis (MGN), found in 50% of primary lesions and amyloidosis found in 35.7% of secondary NS. Six patients were treated with corticosteroids with a remission rate of 50%, two cases (33.3%) of steroid dependence and one case (16.3%) of steroid resistance. **Conclusion:** The NS of the elderly is a relatively frequent pathology in our department. Primary lesions were dominated by GEM and secondary lesions by amylose.

Keywords: Elderly nephrotic syndrome, proteinuria, membranous glomerulonephritis, amyloidosis, Senegal

Nephrotic syndrome in Ouagadougou (Burkina Faso): evaluation of corticosteroid therapy in patients not selected by histological data

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Objective. Evaluate the response of nephrotic syndrome (NS) to corticosteroid therapy in adults in a context of unavailability of histological data. **Methods.** The study was retrospective, carried out in the Department of Nephrology and Hemodialysis in Ouagadougou between January 2010 and June 2014. Were included patients aged 15 years or older in whom NS (massive proteinuria and hypoalbuminemia or hypoprotidemia) was diagnosed, followed for at least 12 months, and medical records were exploitable. Corticosensibility, corticodependence, corticoresistance, partial or total remission, relapse and purity of NS were defined according to KDIGO. Attack dose of prednisone was 1 mg/kg/day for two months. The threshold of significance of the statistical tests was reached for $p < 0.05$. **Results.** During the study period, 150 patients had NS (4.1% of hospitalized patients); 84 (sex ratio = 2.6 and mean age = 30 ± 12 years) were included. The NS was pure (25 cases, 29.8%), impure (45.2%) or unknown character (25%). Mean proteinuria and duration of corticosteroid therapy were 7.5 ± 5.4 g/24 hours and 6.5 ± 2.1 months, respectively. We have observed total remission (49 patients, 58.3%), partial remission or corticodependence (17.9%), or absence of remission (23.8%). Fifteen patients with complete remission (30.6%) experienced relapse of the NS. After multivariate analysis, the factors associated with the absence of complete remission were albumin less than 20 g/L ($p = 0.05$) and serum creatinine above 120 $\mu\text{mol/L}$ ($p = 0.02$). The main adverse effects observed were: cushingoid facies (100%), hyperleucocytosis (100%), hypertension (3.6%). **Conclusion.** Prednisone is well tolerated and produces acceptable results in our unselected adult population. However, patients with organic renal insufficiency would benefit more from immunosuppressive therapy.

Indications for biopsy and histopathologic lesions in the elderly in the nephrology department of Aristide le Dantec

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Objective: Renal biopsy (RB) is little performed in sub-Saharan countries. It is still less practiced in the elderly. The objective of this study was to determine the indications for renal biopsy in elderly Senegalese and to describe the histopathological aspects of biopsied nephropathies of that age group. **Materials and Methods:** This was a descriptive retrospective study performed at the Department of Nephrology of Aristide Le Dantec University Hospital of Dakar, during a period of 5 years (. We included all patients aged over 60 years who had renal biopsy. This RB had to be cortical and contain at least 5 glomeruli. All the RB was by ultrasound-guided procedures. **Results:** On Five hundred and ninety-nine (599) biopsies, one hundred and five (105) were performed in the elderly, a hospital prevalence of 17%. Only 75 biopsies were interpretable. The mean age of patients was $66,5 \pm 5,03$ year with a sex ratio of 2,4. Nephrotic syndrome was leading indication in 26,7% of cases. Glomerular lesions accounted for 63% of cases, tubulo-interstitial lesions 5,2% of cases, vascular lesions 25,36% of cases, and unclassified lesions 6,5%. Of the glomerular lesions, membranous glomerulonephritis (MGN) accounted for 33,33% of cases, focal and segmental glomerulosclerosis (FSGS) 30,76% of cases, amyloidosis 2,82% of cases, minimal change disease (MCD) 10,25% of cases, Crescentic glomerulonephritis (CGN) 7,69% of cases mesangiocapillary glomerulonephritis (MCGN) 2,56% of cases, post-infectious glomerulonephritis (PIGN) 2,56% of cases. Nephropathies were primary in 35,8% and secondary in 64,2% cases. Myeloma was the leading secondary nephropathy and was found in 12,4% of cases. **Conclusion:** Our data, like those of the world literature, shows that GEM is the histological lesion most frequently found in the elderly. However, histological

diagnosis is necessary to clarify a clinical situation, sometimes confused with comorbidities and this may help clinicians adopt an appropriate therapeutic strategy.

Senegalese renal biopsy registry: descriptive analysis of 492 nephropathies biopsied in 4 years

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Objective:Few countries in sub-Saharan Africa have a renal biopsy registry. The objective of this study was to determine the indications for the Renal Biopsy (RB) and to describe the histopathological and etiological aspects of biopsied nephropathies in a sub-Saharan African country (Senegal). **Materials and Methods:**This is a descriptive retrospective study performed at the Department of Nephrology of the Aristide Le Dantec University Hospital of Dakar (Senegal), over a period of 4 years (January 1, 2009 to December 31, 2012). Patients undergoing renal biopsy during the study period were included. This RB had to be cortical and contain at least 5 glomeruli. All the RB were by ultrasound-guided procedures. **Results:**Four hundred and ninety-two (492) RB were completed during the study period. The mean age of patients was 28 ± 14.8 years. There were 294 men and 198 women, a sex ratio of 1.48. Nephrotic syndrome was the leading indication in 53.8% of cases. Glomerular lesions accounted for 80% of cases, tubulo-interstitial lesions 7% of cases, vascular lesions 10.36% of cases, and unclassified lesions 2.64%. Of the glomerular lesions, focal and segmental glomerulosclerosis (FSGS) accounted for 43.3% of cases, membranous glomerulonephritis (MGN) 11.6% of cases, minimal change disease (MCD) 35.5%, mesangiocapillary glomerulonephritis (MCGN) 2% of cases, Crescentic glomerulonephritis (CGN) 2.3% of cases, post-infectious glomerulonephritis (PIGN) 1.6% of cases and one case of IgA nephropathy. Nephropathies were primary in 311 (63.22%) and secondary in 181 (36.78%) cases. Lupus nephritis was the leading secondary nephropathy and was found in 17.13% of cases. **Conclusion:**RB is often essential to guide the diagnosis of nephropathies and to assist in therapeutic decision-making. Encouraging its practice in sub-Saharan Africa will increase knowledge of nephropathies in this region of the world. **Key words:** renal biopsy, nephrotic syndrome, focal and segmental glomerulosclerosis, membranous glomerulonephritis, Senegal.

Isolated renal function impairment revealing renal sarcoiosis

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Objective :The objective was to highlight the importance of etiologic investigation in the presence of unexplained renal function impairment. **Methods :** We report a case of sarcoidosis with renal involvement. The etiologic investigation of renal function impairment of unexplained origin included renal biopsy. **Results:** A 51 year-old female patient developed renal function impairment with creatinine of 18 mg/L, (glomerular filtration rate/GFR of 30 ml/min/1.73 m²). This was incidentally discovered during laboratory work-up prior to cerebral CT scan with no contrast medium injection for persistent headache of unexplained origin. With progressive renal function decline steroid pulses were initiated. Chest X-ray done before steroid pulses showed perihilar bilateral nodular opacities affecting lung parenchyma. History taking and etiologic investigations revealed a productive cough, polyuria and polydipsia with normal glycaemia. Urine sediment and urinalysis showed sterile leukocyturia, tubular proteinuria, hypercalcemia, angiotensin-converting enzyme (ACE) at 2.6 times the normal value and positive inflammatory markers. Kidneys were of normal size on ultrasound with calcification in the renal sinus. Renal biopsy revealed tubulointerstitial nephropathy. The patient received 3 steroid pulses followed by oral steroids at 60mg /day, progressively tapering down. The outcome was favourable after treatment with 50% reduction of creatinine at the 1st month, ACE normalization at the 4th month with normal serum calcium, negative inflammatory markers and radiological normalization of lung parenchyma. **Conclusion:**Tubulointerstitial nephropathy remains the classical lesion in renal sarcoidosis even though granuloma is not always found in the first place but could be present in later biopsies done for persisting renal function impairment. Early steroid treatment slows down progression towards end stage chronic kidney disease.

Glomerular BCL2 and BAX expression in lupus nephritis

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Objectives: Lupus nephritis (LN) is one of the serious complications of systemic lupus erythematosus, the prototypical example of autoimmune disease. To date, the role of different pathways of apoptosis in the pathogenesis of LN is a matter of controversy. **Methods:** We investigate the immunohistochemical expression of two major proteins of the intrinsic pathway of apoptosis; namely bcl2 (the antiapoptotic protein) and bax (the proapoptotic protein) in fifty renal biopsies from patients with LN (8 cases class II, 10 cases class III, 21 cases class IV and 11 cases class V) and five apparently normal renal tissue from nephrectomy specimens due to renal neoplasms as a normal control group. **Results:** We found that the expression of both bcl2 and bax are increased in LN compared to normal control. Glomerular bcl2 expression was significantly higher in class IV than other classes (p-value=0.009) and significantly increased with higher degrees of endocapillary proliferation (p-value=0.008). Also glomerular bcl2 expression was correlated to the number of ki67 positive nuclei in the glomerular tuft within the proliferative classes i.e. class III and class IV (r-value=0.4, p-value=0.02). Glomerular bax expression didn't significantly differ between LN classes and was not correlated to active glomerular lesions. However, the ratio between intraglomerular bcl2 positive cells to intraglomerular bax positive cells was inversely correlated to the percentage of the sclerosed glomeruli per biopsy (r-value=-0.4, p-value=0.01). **Conclusion:** The intrinsic pathway of apoptosis might contribute to the pathogenesis and activity of LN through overexpression of its antiapoptotic protein bcl2, however, the balance between antiapoptotic proteins and proapoptotic proteins might modulate the progression of glomeruli from hypercellular to sclerotic state, thus affecting the course of the disease.

Acute pancreatitis revealing a systemic lupus erythematosus

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Acute pancreatitis as an initial presentation of systemic lupus erythematosus is rare and is reported in only 12 cases in the Literature. **Case report :** A 45-year-old woman without significant past medical history, was hospitalized for non necrotizing acute pancreatitis . No usual aetiology was found. Associated articular manifestations and biologic abnormalities were the clue to the diagnosis of lupus pancreatitis. **Discussion :** Acute pancreatitis is rarely seen in systemic lupus erythematosus. In our patient, the evolution was favourable of the pancreatitis with corticosteroids.

Lupus nephritis in Algeria: a nephrology experience

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Objectives : Systemic lupus erythematosus(SLE) is an autoimmune disease of unknown etiology with heterogeneous clinical presentation. Renal impairment secondary to SLE is the most frequent and the most severe complication .The purpose of the study is to describe clinical,biological ,immunological and histological lesions of 310 adults patients with only lupus nephritis (LN) . **Methods :** We performed a retrospective and descriptive study in our nephrology unit included 310 patients over a period of ten years between january 2004 and december 2014. Clinical,biological and histological data were collected and analysed for all the patients. One or several kidney biopsy were performed and histological lesions were analysed by the same team of anatomopathologist using ISN/RPS classification 2003. **Results:** The study included 310 patients(290 (94%) females and 20(7%) men)whose average age was 33 years (Ranges :17-65 years).Clinical renal symptoms at the admission were : Nephrotic syndrome (88%),isolated proteinuria or hematuria(12%) and renal failure(75%) .Auto antibodies specific for SLE were positif for 94% of patients.The renal histopathology revealed in the 290 females: 25% class II ISN/RPS LN ,25 % class III LN ,47% class IV and 3% class V. LN was associated to vascular lesions in 17 females patients such as : thrombotic microangiopathy (6 patients), lupus vasculopathy (one patient) and antiphospholipid syndrome associated nephropathy (10 patients).For males lupus, 60 % class III ISN/RPS LN, and 40 % class IV. For treatments, we associated corticosteroids and immunosuppressor treatments according to the indication such as azathioprine, mycophenolate mofetil and rituximab in refractory forms of LN. **Conclusions:** Our data are similar to literature with female predominance and severity of renal impairment due to the high prevalence of proliferatives forms.Lupus is still severe in males as described in other studies.The comparison with historical data highlights the evolution of treatments of LN in Algeria.

Special case : Arteriel thrombosis caused by nephrotic syndrome

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Objective : To describe a special case of arterial thrombosis caused by nephrotic syndrome. **Materials and methods:**We report the case of a patient who presents several arterial thromboses complicating a nephrotic syndrome. **Results:** Mr KA, 25 years old, has a relapsed nephrotic syndrome since the age of 8 years, complicated by an intracardiac thrombus and thrombosis of the right popliteal artery leading to amputation of the right leg in 2012. In June 2013, the patient presents relapse of the nephrotic syndrome. Clinical examination shows very important inferior member edema and ascite. The biological report shows a proteinuria / 24h: 6.6 g / 24h, albuminemia at 5 g / l; A protein at 30 g / l. Renal function is normal. Renal biopsy revealed collapsing focal segmental glomerulosclerosis. The patient is placed under oral corticosteroid therapy, anticoagulant and diuretic. Ten days after, he presented acute thrombosis of the inferior right limb, he benefited from a femoral embolectomy with success.Two days later he had abdominal pain. The angio-scanner detects thrombosis of the right renal artery, superior mesenteric ischemia, splenic infarction and thrombosis of the two internal iliac arteries. The thrombophilia assessment is negative.Three years later, the patient relapsed once with complete remission under oral corticosteroid therapy, renal function is still normal and the patient is still under anticoagulant. **Conclusion:** Arterial thrombosis is a rare but serious complication of nephrotic syndrome. Assessment of various risk factors such as the duration and severity of hypoalbuminaemia may be useful in identifying high-risk patients.

Thrombotic microangiopathy secondary to malignant hypertension

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Objective : The aim of our study is to describe the prevalence of TMA / malignant hypertension and the clinical, biological and renal histological characteristics of these. **Methodology:** We conducted a retrospective study over a 15-year period. Clinical, biological, histological and therapeutic data were collected from medical records. **Results:** We collected 28 cases of TMA including 3 cases secondary to malignant hypertension (corresponding to a prevalence of 10.71%). There are 2 women and 1 man, average age is 38,3 years, the mode of revelation is: convulsion in one case, headache and vomiting in two cases. Blood pressure on admission was 200/120 mmHg. Organic: hemolytic anemia with an average hemoglobin of 8.3g / dl, schistocytes > 1%, collapsed haptoglobin, platelet counts to 82.000el / mm³, renal failure with creatinine to 185.33mg / l and a urea 3.5g / l, proteinuria and hematuria. C3, C4 normal. Immunological tests were negative. Renal biopsy revealed signs of TMA associated in one case with diffuse cortical necrosis and in another case to signs of néphroangiosclérose. The treatment consisted of: BP control by calcium inhibitor, diuretic and inhibitor of the enzyme conversion and all the patients required dialysis on admission. The evolution was marked by the resolution of thrombocytopenia and hemolysis. However, all patients remained dialysis-dependent. **Conclusion:** Malignant hypertension may be responsible for TMA. A good control of blood pressure corrects anemia and thrombocytopenia. The progression of renal insufficiency is unpredictable and the use of dialysis is common.

Isolated non diabetic renal disease in diabetic patients : a Moroccan report

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Objective: To describe the characteristics of diabetic patients with isolated non-diabetic renal disease. **Methods:** From January 2000 to December 2015, 28 diabetic patients with suspected NDRD underwent renal biopsy. The case records of these patients were retrospectively analysed. We report 28 cases of isolated NDRD in diabetic patients diagnosed in our unit and present our biopsy criteria in these patients. **Results:** A total of 28 patients (16 were males) with a mean age of 43 years (10-76). Five had a type 1 diabetes and 23 had a type 2 diabetes. The mean duration of diabetes was 66 and 121 months in type 1 and 2 respectively. Indications for biopsy included: absence of retinopathy in 26 cases (92,8%), heavy proteinuria in 11 cases (39,2%), acute renal failure in 16 cases (57,1%), rapidly progressive renal failure in 2 cases (7,1%), hematuria in 18 cases (64,2%), extra-renal signs in 9 cases (32,1%), short duration of diabetes in all cases. **Conclusion:** NDRD was observed in our study in patients with a short duration of diabetes and atypical clinical or biological findings.

Utility of urine dipstick abnormalities in predicting raised serum creatinine in patients at risk of chronic kidney disease in Buea

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Objective: To evaluate the utility of urine dipstick abnormalities in predicting raised serum creatinine in adults at risk of CKD in Buea. **Methods:** We carried out a cross-sectional study at the Regional (BRH) and Military hospitals Buea and the sub divisional hospital, Muea. Consenting adults with hypertension, diabetes or HIV were eligible. Pregnant women, severely ill patients and patients with confounders for proteinuria, hematuria and raised serum creatinine were excluded. Serum creatinine assay was done at the BRH laboratory. Proteinuria and hematuria were the dipsticks abnormalities considered and values $\geq 1+$ were considered positive. Raised serum creatinine was defined as values ≥ 1.4 mg/dL for males and ≥ 1.3 mg/dl for females. Ethical approval was got from the Faculty of Medicine and Pharmaceutical Sciences, Douala. The data was analyzed using Epi-info 7.0.

Results: A total of 251(151 females) patients were included. The mean age \pm SD was 53.8 ± 13.4 years (range 22 – 87). In total, 58 (23.1%) participants had urine abnormalities. Urine abnormalities seen were proteinuria alone (n=35; 60.3%), hematuria alone (n=4; 6.9%), and proteinuria + hematuria (n=19; 32.8%). The prevalence of raised serum creatinine was 18.8% (n= 47). Across the risk categories, proteinuria had a positive predictive value (PPV) of 0.2 - 0.69 and a negative predictive value (NPV) of 0.86 – 1. Proteinuria + hematuria had a 100% ability to predict raised serum creatinine in each risk category (PPV= 1). **Conclusion:** The presence of proteinuria + hematuria on dipstick is highly predictive of raised serum creatinine while the absence of proteinuria is highly predictive of a normal serum creatinine in diabetic, hypertensive and HIV positive patients.

The prevalence and factors associated with renal impairment at diagnosis of multiple myeloma in Yaounde

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Objectives: To determine the prevalence and factors associated with renal failure at diagnosis of multiple myeloma (MM). **Methods:** This was a multicentric, retrospective analysis of medical record of patients seen in the Rheumatology, Hematology, medical oncology and nephrology units of 3 tertiary hospitals in Yaounde. We included patients who met the International Myeloma Working Group criteria for MM from 2010-2015. Patients with no serum creatinine values or missing records were excluded. Relevant clinical and laboratory data at diagnosis was noted. Renal impairment referred to a serum creatinine ≥ 20 mg/l. The study was approved by the hospital ethics board. **Results:** In total, 41 patients (29 males) were included in the study. Their mean age was 58.44 ± 9.8 years (38-82 years) with 24 (58.5%) being less than 60 years. Chronic non-steroidal anti-inflammatory (NSAIDs) use was reported in 14.7% (n=6). Baseline laboratory data (mean \pm SD values) was as follows : hemoglobin= 8.8 ± 2.8 g/dl (anemia: 73.2%), uric acid= 89.6 ± 40.8 mg/l (hyperuricemia: 70.6%), and serum calcium= 104.7 ± 21.3 mg/l (hypercalcemia: 15%). Seven patients had Bence- Jones proteinuria. Monoclonal IgG (84.6%) and Kappa light chain (77.27%) were the most frequent immunoglobulin abnormalities. The prevalence of renal impairment was 44% (n=18). The use of NSAIDs (P= 0.004) and the presence of lambda light chains (P=0.02) were significantly associated with kidney involvement. Anemia, hyperuricemia and hypercalcemia were not associated with kidney impairment. **Conclusion:** Kidney impairment is frequent at diagnosis of MM in Yaounde and may result from multiple factors. **Key words:** renal impairment, associated factors, multiple myeloma, cameroon.

Multiple myeloma in Nephrology: Profile at enrollment and kidney outcomes

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Objective: The objective of this study was to determine the clinical and biological parameters and outcomes of patients with multiple myeloma. **Patients and Methods:** Retrospective study conducted over four years, including all patients with a confirmed diagnosis of multiple myeloma who had kidney impairment. All patients were hospitalized in our Nephrology unit. Epidemiological, clinical, biological, radiological, treatment and results were analyzed. Results: 33 cases were included. Sex ratio was 1.5. The average age of patients was 63.15 years. All patients had multiple myeloma stage IIIB according to Durie and Salmon classification. It was a Lambda light chains myeloma in 23 cases and Kappa in 10 cases. Severe bone syndrome was present in 100% of cases and a pathologic fracture was noted in five cases. End Stage a renal disease was observed in 17 cases and renal failure was severe in 5 cases. Myeloma cast nephropathy was noted in 20 cases and functional renal failure in 12 cases. 12 cases required acute hemodialysis. Moreover, 29 of our patients had a normochromic normocytic anemia with hemoglobin to an average 7.84 ± 1.89 g / dl. Fifteen patients had severe hypercalcemia. The mean percentage of plasmacytes in bone marrow was 48%. Two patients refused medical treatment. Nineteen patients were under 65 years old and four patients had undergone received a bone marrow transplant. Twenty-three patients were treated with the protocol of Alexanian, six received Thalidomide, one patient received cyclophosphamide and another Bortezomib. Death was observed in 10 cases, partial recovery of renal function was observed in 14 cases and 13 patients progressed to ESRD. **Conclusion:** Renal involvement of myeloma is common and renal recovery remains rare. This is mainly due to diagnosis delay and it does pejoratively influence the prognosis of the disease.

Renal AA Amyloidosis and post-primary tuberculosis: Unusual association with improvement of nephrotic syndrome after tuberculosis treatment Case report

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Objective: To describe the evolution of a patient with an unusual association of Renal AA amyloidosis and post-primary tuberculosis. **Case :** We describe the case of a 49 years old man with a past history of tuberculosis treated and declared cured in 1999, admitted in the nephrology unit for evaluation of lower limb edema of one months duration associated with fatigue, night fever and productive cough. Work-up showed 24 hours proteinuria of 6g and serum protein electrophoresis with a serum albumin level of 14 g/l. eGFR (MDRD) was 72 ml/min and kidney size and structure were normal on renal ultrasound. Diagnosis of nephrotic syndrome was made and etiologic factors were investigated for. Immunologic markers were negative. Inflammatory syndrome with erythrocytes sedimentation rate at 110mm and inflammatory anemia at 10.1 g/dl of hemoglobin were also found. Renal biopsy showed AA amyloidosis and also 2 out of 23 glomeruli were sclerotic. Chest radiography revealed apical heterogenous opacity of the right lung that was attributed after evaluation to pulmonary tuberculosis. Patient was treated for tuberculosis. After three months of treatment we noticed a regression of the nephrotic syndrome. **Conclusion:** Though rare, the association of post-primary tuberculosis and AA amyloidosis is possible. Treatment of tuberculosis lead to an improvement of the nephrotic syndrome in our case.

Renal and systemic amyloidosis in systemic lupus erythematosus

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Objective: We describe a patient with systemic lupus erythematosus (SLE), a disease rarely associated with amyloidosis, who developed severe renal amyloidosis AA. **Case report:** A 43-year-old female with a 5-year history of systemic lupus erythematosus was admitted because of edema syndrome. Clinical Laboratory findings revealed a pure nephrotic syndrome, with a 24-hour protein excretion of 7.2g, severe hypoalbuminaemia, with normal renal function. Serum protein electrophoresis objectified hypoalbuminaemia, with a peak alpha₂ zone, linked with an inflammatory syndrome, without increase of gamma globulins. An immunological assessment included antinuclear antibodies, and anti-DNA which were positives. The anti-CCP was negative. Renal biopsy showed deposition of AA amyloid as demonstrated by Congo red staining and reactivity with protein AA-specific antibodies. Immune deposits were present in the mesangium, the capillaries and the interstitium, but histopathological changes consistent with lupus nephritis were not detected. Four months later, the evolution was characterized by the occurrence of a severe kidney failure with splenomegaly and hepatomegaly, with death in the context of cardiogenic shock. **Conclusion:** The association between SLE and secondary amyloidosis is most unusual. It occurs after several years of evolution. The treatment is not clearly codified.

Renal amylosis revealing HIV infection : A case report.

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Objective : To report a case of HIV infection before advent of antiretroviral therapy which has transformed into a chronic disease. **Patient and method:** This was a patient hospitalized in the Department of Infectious Diseases of Ibn Rochd University Hospital, Casablanca, for renal and cardiac amyloidosis. **Results:** We report the case of a 34-year-old S.F, hospitalized in the Department of Infectious Diseases for confirmed renal amyloidosis revealed by an impure nephrotic syndrome, and suspected cardiac amyloidosis with biventricular infiltrative cardiomyopathy. The diagnosis of HIV infection was made in the presence of a positive serology in the framework of the pre-therapeutic assessment by immunosuppressants and confirmed by a Western blot. Antiretroviral therapy with AZT / 3TC / EFV was initiated. The evolution was marked by two events: anterior and posterior tibial thrombosis leading to the amputation of the left leg. A month later, the patient was readmitted for acute heart and renal failure, leading to death. **Conclusion:** HIV infection is responsible for a chronic inflammation that can cause a systemic amyloidosis including the kidney and the heart which may affect patient outcomes; hence the need for early initiation of antiretroviral therapy and multidisciplinary care.

Predictors of iron deficiency in anaemic patients with chronic kidney disease stages 3-5 non-dialyzed in Cameroon: a multicentric study

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Objective: To identify predictors of iron deficiency in anaemic patients with Chronic kidney disease (CKD) stages 3 through 5 Non-dialyzed in Cameroon. **Methods:** We conducted a multi-center cross-sectional analytic study including all consenting anaemic adult patients with (CKD) stages 3 through 5 non-dialyzed who consulted the nephrology units of Douala and Yaounde from November 2015 to April 2016. We excluded patients with acute illnesses, on iron supplementation, or a recent history of blood transfusions (within 3 months). Relevant clinical data including nutritional status and drug history were noted. We collected blood for assay of plasma iron indices. We defined anaemia as hemoglobin (Hb) <13g/dl for men and <12g/dl for women, iron deficiency (ID) as a TSAT <20% or serum ferritin <100µg/l, and absolute ID as TSAT <20% + serum ferritin <100µg/l. The ethics board of the faculty of Medicine & Biomedical Sciences, University of Yaounde I approved the study. **Results:** We included 99 participants (63 males), mean age of 57.7 ± 13.8 years, with 47.8% having diabetes. The mean ± SD laboratory values were: eGFR = 18.2 ± 11.7 ml/min (48% in stage 5), UPCR = 1 639 ± 1 349.1 mg/g and Hb level = 8.9 ± 2.0 g/dl. The prevalence of ID was 47% with 41.2% being absolute ID. China clay consumption, mid upper arm circumference <27.5 cm, Hb level <7 g/dl, mean corpuscular volume (MCV) <85 fl and mean corpuscular hemoglobin concentration <30 pg were associated with iron deficiency (p < 0.05). However, only a MCV <85 fl (OR = 67.7; 95% CI = 1.2-20.9; p = 0.02) was predictive of iron deficiency. An eGFR ≥ 22 ml/min (OR = 28.9; 95% CI = 1.2-68.8; p = 0.04) was predictive of absolute ID in the iron deficient population. **Conclusion:** Iron deficiency is frequent in Cameroonian patients with non-dialyzed CKD. Mean corpuscular volume may serve as a screening tool to identify anaemic patients who require assay of the costlier plasma iron indices. **Key words:** Iron deficiency, anemia, predictors, Non-Dialyzed CKD

Cardiovascular risk factors and nephropathy in the black diabetic patient in southern Benin

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Objective: To describe the cardiovascular risk factors related to nephropathy in the black diabetic patient. **Methods:** We carried out a cross-sectional, prospective, descriptive and analytical study over a 6-month period, from February 28th to August 30th, 2014. We included patients with type 2 diabetes who agreed to participate in the study and who did the 24-hour urine albumin. Statistical analysis was done using Excel 2013 and SPSS software 18.0 version. **Results:** One hundred and eighty-one (181) patients were included; 86 among them had diabetic nephropathy (47.5%), comprising 35 males and 51 females. Their age ranged from 19 to 85 years with a mean of 55.22 ± 11.83 years. Patients' BMI ranged from 18.93 to 56.01 kg/m² with a mean of 28.41 ± 5.5 kg/m². Among patients with a family history of diabetes, 49.5% had positive albuminuria versus 45.1% of patients without a family history of diabetes who had albuminuria (p = 0.3). The incidence of positive albuminuria in patients with unstable diabetes was 57.4% compared with 32.9% in patients with stable diabetes (p = 0.001). Positive albuminuria was found in 49.5% of patients with abdominal obesity versus 41.3% of diabetic patients without abdominal obesity (p = 0.6). In patients with hypertension, the incidence of positive albuminuria was 65.2% versus 36.6% in diabetic patients with normal blood pressure (p = 0.000). Total hypercholesterolemia had a statistically significant association with the occurrence of positive albuminuria (p = 0.04). The oldness of diabetes was also associated with the occurrence of positive albuminuria (p = 0.01). **Conclusion:** High blood pressure, hypercholesterolemia, diabetes stability and diabetes oldness play an important role in the onset and progression of diabetic nephropathy. Strict control of these risk factors is therefore crucial. **Key words:** Risk factors, Diabetic nephropathy, Microalbuminuria, Benin

Cardiovascular disease burden in patients with non-dialysis dependent chronic kidney disease

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Objective: To evaluate the burden of cardiovascular disease in patients with non-dialysis dependent CKD (ND-CKD) and audit the management of modifiable cardiovascular risk factors (CVRF). **Methods:** A cross-sectional study carried out from January to March 2016 including all consenting patients with ND-CKD attending the nephrology outpatient clinic of the Douala General Hospital (DGH). Relevant clinical and para clinical data were collected from patient's files. A lipid profile, urinary protein excretion and resting electrocardiogram was performed for all participants. We used the KDOQI 2003 dyslipidemia, the KDIGO 2012 and JNC 8 guidelines for the definition and evaluation of the management of lipid abnormalities, proteinuria, anemia and hypertension respectively. A p value < 0.05 was considered statistically significant. **Results:** A total of 83 patients (45 males) with ages ranging from 8 -87 years, median 59 years (IQR 51- 67) th were included. The mean number of CVRFs per patient was 5.19 ± 1.64 (range 1-9). The most frequent traditional CVRFs were hypertension (90.36%), abdominal obesity (79.52%), dyslipidemia (69.88%), while anemia (78.31%), hypeuricemia (69.88%), and proteinuria (44.58%) were frequent non-traditional CVRF. Left ventricular hypertrophy (LVH) (48.19%), coronary heart disease (CHD) (30.12%) and heart failure (12.05%) were the most frequent CVDs identified. LVH ($p=0.0093$) and CHD ($p=0.02$) significantly increased with stage of CKD. All patients with hypertension were on antihypertensive therapy, 53.44% of patients with dyslipidemia on statins, 75.38% of patients with anemia on treatment, 72.41% of patients with hypeuricemia on hypouricemic agents and 81.82% of patients with hyperphosphatemia on phosphate binders. Target values were achieved in over 50% of participants for LDL-cholesterol and phosphorus levels while only 26.67% and 6% achieved target blood pressure and hemoglobin levels respectively. **Conclusion:** There is a high burden of CVRF and disease in ND-CKD populations. Control of CVRF remains suboptimal especially for hypertension and anemia.

Patterns of arterial stiffness among black African ancestry patients with chronic kidney disease in Cameroon

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Objective: To assess the patterns of arterial stiffness (AS) among black African patients with chronic kidney disease (CKD) living in Cameroon. **Methods:** 150 CKD patients (Mean age : 52±15 years, 56.7% male) were enrolled in a cross-sectional study conducted at the Douala General Hospital, from November 2015 to May 2016. We recorded in each participant: medical history and current medication, weight, height, waist circumference, and waist-to-hip ratio (WHR). In all participants, we performed hemodynamic measurements including blood pressure (BP), heart rate (HR), aortic pulse wave velocity (PWV), a direct measure of AS and augmentation index corrected for HR (AIx), a surrogate measure of AS using a Mobil-O-Graph® device. PWV was considered high for values ≥10m/s. Fasting blood sample was collected for plasma glucose and lipid profile analysis. Linear regression was used for determinants. **Results:** PWV increased with aging ($p<0.05$). Age-adjusted PWV was faster in non-dialysed ($n=90$) than in hemodialysed ($n=60$) patients: 8.4 ± 1.6 vs 7.8 ± 1.5 m/s ($p=0.026$), while AIx was similar: 21.9 ± 13.6 vs $20.4\pm11\%$ ($p=0.4$). Approximately 15% of study participants had $PWV\geq10$ m/s, indicating damage of their aorta, which was more pronounced in non-dialysis than in hemodialysis group ($p=0.008$). Multivariate analysis performed in all participants revealed that age, WHR, systolic BP, mean arterial pressure (MAP), triglycerides, iron infusion were positively associated with PWV, which was also inversely related to antihypertensive medication ($p<0.05$). Moreover, female gender, MAP and iron infusion emerged as independent determinants of AIx ($p<0.05$). **Conclusion:** This study reveals increased AS in Cameroonian CKD patients, predominantly among non-dialysed participants. Slower PWV in hemodialysed individuals suggests improvement of their aortic distensibility by dialysis. Our observations suggest that AS may represent an important tool to monitor arterial damage progression and therapeutic responses in black African CKD patients.

TINU Syndrome : An Atypical Case Report

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Objective : TINU syndrome is a rare inflammatory disease of unknown etiology, associating tubulo-interstitial nephritis (TIN) and uveitis. The aim of this paper is to highlight the importance of knowing the atypical presentations of TINU syndrome and to know how to think about it when it presents in teenagers. **Methods :** We report a case of atypical TINU syndrome, retained after excluding any other disease likely to explain an oculorenal syndrome. **Results:** A 15-year-old patient was admitted in our Nephrology Department for the investigation of acute renal failure associated with a history of arthralgia, myalgia and deterioration of the patient's general condition since August 2016. During hospitalization, the patient developed a painful red eye. Investigations carried out allowed us to eliminate all differential diagnoses, particularly systemic or infectious (viral or bacterial). Anti-Nuclear Antibodies were positive at 1 / 1000th of speckled fluorescence with negative antigenic targets. Renal biopsy revealed tubulointerstitial nephritis with lymphocytic infiltrate, without glomerular or vascular involvement and absence of granuloma. Ophthalmologic examination was in favor of an acute unilateral anterior uveitis. The diagnosis of atypical TINU syndrome was retained and the patient started systemic corticosteroid therapy and cortisone eye drops. The progression was favorable with spectacular renal function recovery (eGFR at 84ml / min after 2 months of treatment). **Conclusion:** This observation illustrates a rare case of atypical TINU syndrome due to the non-concomitance of renal and ocular manifestations, the unilaterality of uveitis and the presence of anti-nuclear antibodies in our patient.

Tubulointerstitial nephritis and Uveitis :A report of 2 cases

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Objective : To report two cases of TINU with different modes of presentation.

Cases: Case 1: A 17-year-old patient with no previous medical history admitted for asthenia with vomiting. Biology revealed severe renal insufficiency with a serum creatinine of 80mg/l, a 24-hour urinary protein excretion of 1.5 g / 24h, and an active urinary sediment. Serum complement was normal and the immunological status (AAN, Anti DNA, Anca) was negative. Renal histology showed non-granulomatous interstitial nephritis with acute tubular necrosis. The patient rehydrated with improvement in renal function. Three weeks later, the patient presented for the same symptoms with conjunctival hyperaemia on anterior uveitis, thus consistent with a diagnosis of TINU syndrome. He received 6 months of oral corticosteroid normalization of renal function and regression of uveitis.

Case 2: A 29-year-old patient with a history of recurrent uveitis since 1 year whose etiologic assessment was negative. The patient was admitted for the management of acute renal insufficiency with a serum creatinine of 35mg/l discovered incidentally. Proteinuria was minimal : 0.3gr / 24h, without leukocyturia or hematuria. Serum complement and ANA, Anti DNA, anti SSA, SSB, anti GBM and ANCA were negative. Renal histology revealed polymorphic interstitial infiltrates with degenerative tubular epithelium without granuloma. He had no evidence of infection or malformative uropathy and angiotensin converting enzyme level was normal. The diagnosis of TINU was retained and the patient placed on 0.5mg / Kg / daily dose of corticosteroids; Renal function remained stable after 2 years of treatment. **Discussion and conclusion:** TINU syndrome is probably under diagnosed because renal involvement and uveitis are not always concomitant. The diagnosis is usually made after excluding other causes of kidney damage that may be accompanied by uveitis including sarcoidosis and Sjogren syndrome. Corticosteroid therapy usually allows recovery of renal function with possible relapses.

IgA Nephropathy presenting as recurrent anaemia in an African: a case report

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Objective : To present a case of histologically diagnosed IgA nephropathy presenting with recurrent anaemia in Nnewi, South East Nigeria which is a rare disease in blacks. **Methods :** A 29 year old male with clinical, laboratory and histologic features of IgA Nephropathy is presented and related literatures reviewed. **Conclusion:** Although IgA nephropathy is rare in the black race, with heightened clinical suspicion and appropriate investigations, more cases may be diagnosed. **Keywords:** IgA nephropathy, histology

Prevalence of diabetic nephropathy and associated factors in type 2 diabetics in Cotonou in 2016

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Objective: To determine the prevalence of diabetic nephropathy and to identify the factors associated with its occurrence in type 2 diabetics in Cotonou in 2016. **Methods:** This is a cross-sectional, descriptive and analytical study carried out in the centers for the management of diabetes in Cotonou from 03 October to 1 December 2016. All type 2 diabetics, aged 18 years and over followed in the centers in Cotonou were included. Diabetic nephropathy was defined by the combination of 3 criteria: previous diabetic or newly diagnosed diabetes, presence of microalbuminuria superior 30mg / 24h or proteinuria greater than 300mg / 24h and diabetic retinopathy. Associated factors such as socio-demographic characteristics, antecedents and complications were sought by logistic regression in univariate analysis. The data were entered and analyzed in Epi Info. The threshold of significance $p < 0.001$, creatinine clearance (MDRD) $< 60 \text{ ml / min / } 1.73 \text{ m}^2$ ($p = 0.027$), peripheral neuropathy ($p = 0.010$), total cholesterol ($p < 0.028$) and diabetic dysautonomia ($p = 0.007$) were the factors associated with the occurrence of diabetic nephropathy. **Conclusion:** It is important to provide to type 2 diabetics an integrated management that takes into account all risk factors. **Key-words:** Associated factor; Benin; Diabetic nephropathy; Prevalence; Type 2 diabetic patients.

A review of admissions in the department of nephrology over one year period

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Objective : To describe the epidemiological profile of nephrology admissions in the nephrology department of CHU Ibn Rochd. **Material and Methods:** we retrospectively reviewed medical records of all patients admitted from January to December 2012. e Age, sex, relevant clinical, laboratory and therapeutic data was noted. **Results:** About 290 patients (55.3% males) were included. The average age was 39.3 ± 17 years. 14.22 % of the patients had high blood pressure, 6 % were diabetics. Reasons for admission were : 5 % were admitted for initiation of hemodialysis (5%), impure nephrotic syndrome (24%), pure nephrotic syndrome (15.2 %) 6.86 % for other glomerular syndromes (6.86% and rapidly progressive renal failure (3%). The mean daily urine output was of $1580 \pm 830 \text{ ml}$ and 24 hours urinary protein excretion was $3.85 \pm 3.67 \text{ g}$ the Total serum protein was $56.6 \pm 14.3 \text{ g / l}$, o serum albumin = $30.6 \pm 10.7 \text{ g / l}$, and plasma creatinine $49 \pm 37 \text{ mg / l}$. Renal biopsy revealed membranous glomerulonephritis in 13 % (12% lupus nephritis), focal segmental glomerulosclerosis in 11.3 % , renal amyloidosis in 7.14 % and IgA Glomerulonephritis in 5.35 %. About 50 % of patients received corticosteroid therapy and 10.78 % received cyclophosphamide. There was clinical and biological improvement in 55.8 % of patients. **Conclusion:** The knowledge of the epidemiological profile of the hospitalizations in nephrology allows to implement the most frequent renal pathologies, and thus to improve the quality of coverage and the forecast of the patients.

The contribution of the ambulatory blood pressure monitoring in the assessment of blood pressure control at the Yaounde general hospital

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Objective: To evaluate the accuracy of Ambulatory Blood Pressure Monitoring (ABPM) compared to the traditional method of measurement in the consultation room. **Methods:** This was a cross-sectional study carried out over a period of 5 months (February to June 2016) in the cardiology outpatient unit of the Yaoundé General Hospital. The subjects recruited were hypertensive patients undergoing treatment. Blood pressure control was set as the average of values gotten from 3 previous consultations in addition to that of the day of recruitment. All the participants in the study gave informed consent. The variables evaluated were the epidemiological characteristics; Para clinical variables and the BP. The target for the averages of BP obtained from patients in a 24 hour period using Ambulatory blood pressure monitoring (ABPM) was BP < 130/80 mmHg. Statistical analysis was done with Epi info version 3.5.4. The results of the statistical tests were considered significant for a p value < 0.05. **Results:** One hundred and seventeen hypertensive patients were recruited. The male to female sex ratio was 0.53. Average age of participants was 59.77±11.42 years with extremes at 32 and 78 years for men, 30 and 87 for women. Obesity was found in 47.5%, dyslipidemia in 21.4% and diabetes in 18.60% of cases as the cardiovascular risk factor. ABPM showed that blood pressure was well controlled in 64.50% of the patients and not controlled in 36.50%. The nocturnal drop in BP was observed in 49 patients (41.50%). The antihypertensive drug regimen used was monotherapy in 33 cases (28%), bitherapy in 47 cases (40%), tritherapy or more in 36 cases (32%). **Conclusion:** This study showed that the blood pressure which is usually gotten in the consultation room and seems controlled is not always the true reflection of nycthemeral control. This shows the importance of the ABPM and its use as a tool for the evaluation of the optimal BP control. **Key words:** Blood pressure control, Ambulatory blood pressure monitoring, Yaounde.

Membranoproliferative Glomerulonephritis: epidemiological caractéristique, clinical presentation and evolution

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Objective : To study the epidemiological, clinical, histological, therapeutic profil and evolutionary characteristics of MPGN. **Patients and methods:** single-center retrospective study of 48 cases with histologically proven MPGN collected in our department over a period of 4 years . We analyzed demographic, clinical and histological data and treatment results of the disease. **Results:** The mean age of our patients was 38.3 years. Twenty six cases were female (54.16%). The clinical presentation was dominated by edematous syndrome found in 62.5% of cases. Systemic manifestations were found in 58.3% of cases. Nephrotic syndrome was present in 29.2% of cases. MPGN was of primitive nature in 35.4% and secondary in 65.6% of cases in which lupus was the most frequent cause (71%). Hypocomplementemia was found in 15 cases. 18 patients presented with Renal failure. MPGN type I was founded in 42 case (87.5%) and dense deposits disease in 6 cases (12.5%). The treatment of idiopathic MPGN consisted of corticoids alone (6 cases), corticoids plus cyclophosphamide (5 cases) or plus mycophenolate mofetil (2 cases). The treatment of secondary forms was etiological. Complete remission was observed in 31.25% and partial remission in 39.58% of cases. Moreover, worsening was observed in 29.17% of cases, including 10 cases progressing to ESRD. Among the poor prognostic factors, the only one that has been proven at diagnosis in our study was kidney failure. **Conclusion:** GNMP is a glomerular disease that remains common in our environment, most often secondary, has a poor prognosis.

Dermatological manifestations and associated factors in patients with chronic kidney disease in Douala-cameroon

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Objectives: To determine the dermatological manifestations and their associated factors in patients with chronic kidney disease (CKD).

Methods: We conducted a cross sectional study from February to June 2016 including 239 patients with CKD (87 non-dialyzed and 152 dialyzed) in the nephrology and hemodialysis unit of the Douala General Hospital, a tertiary reference hospital in Cameroon. For each participant, an interview and a dermatological exam was done by a final year medical student under the supervision of a dermatologist. Four milliliters of blood was collected to measure serum calcium, phosphates, intact Parathormone and albumin. Logistic regression was used to identify associated factors. $p < 0.05$. **Results:** Mean age of participants was 52.2 ± 14 years with 57.3% of males, 30% were diabetic, 11.7% were hepatitis C positive and 11.3% HIV positive. Mean calcemia 90.7 ± 11.2 mg/L, phosphoremia 44.7 ± 20.3 mg/L, intact parathormone 607.4 ± 633.3 pg/mL and albumin was 40.5 ± 5.8 g/L. Median duration on hemodialysis was 2.9 years and 92.1% of patients had no residual diuresis. In total 223 patients (93.3%) had at least one dermatological lesion. The main lesions were: Xerosis (71.9%), pruritus (41.4%), melanoderma (38.4%), inter-toes dermatophytic intertrigo (22.1%), half-and-half nails (17.9%). Other manifestations were onychomycosis (16.7%), palmo-plantar keratoderma (10.5%), alopecia (10%), acne (9.2%), melanonychia (8.3%), mouth sweat (6.3%), ungueal hyperkeratosis (5.9%), onycholysis (4.6%), leukonychia (4.6%) eczema (3.7%), and scabies (3.3%). Dermatological manifestations were more frequent amongs patients on hemodialysis (96.7% versus 87.4%, $p=0.01$). Associated factors to xerosis were absence of residual diuresis ($p=0.03$), absence of use of emollients ($p=0.04$), and hemodialysis ($p=0.005$). Pruritus was associated with Xerosis ($p=0.01$), hyperparathyroidism ($p=0.02$), hyperphosphoraemia ($p=0.001$). Been on hemodialysis was associated to melanoderma ($p=0.001$). **Conclusion:** Dermatological manifestations are frequent in CKD patients especially those on hemodialysis and the majority of associated factors are treatable.

Pattern of hyponatremia in the nephrology in-patient unit of the Yaounde general hospital in cameroon

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Objective: To describe the aetiological, therapeutic and clinical outcomes of hyponatremia in the nephrology in-patient unit of the Yaounde General Hospital (YGH) in Cameroon. **Method:** This was an observatory retrospective study of medical records of patients admitted from March to November 2016 in the nephrology unit of YGH who presented a true hyponatremia. All patients older than 18 years diagnosed with true hyponatremia were included. Variables studied were clinical severity, aetiology, treatment and clinical outcome. True hyponatremia was defined as hyponatremia with absence of any condition leading to false hyponatremia. Chronic hyponatremia referred to a known duration at least 48 hours. Clinical severity was graded according to the 2014 joint European guidelines. The study was approved by the ethics committee of YGH. **Results:** A total of 25 patients (17 males) who met the inclusion criteria were studied. Their mean age was 46 ± 18 years. The mean plasma sodium level was 128.5 ± 6.44 (range 107-134) MEq/l. A total of 20 (80%) of patients had chronic hyponatremia. Hyponatremia was graded as mild in 16 cases (64%), moderate in 5 cases (20%) and severe in 4 (16%). About two-thirds $n=17$ (68%) were asymptomatic. The aetiologies were: chronic kidney disease stage 5, $n=13$ (52%), acute renal injury, $n=4$ (16%); volume depletion from diarrhoea, $n=3$ (12%); polyuric phase of acute tubular necrosis $n=3$ (12%) and unidentified causes, $n=2$ (8%). 11 of 13 patients with CKD were treated by hemodialysis while the others were treated conservatively with fluid restriction. Patients with volume depletion were rehydrated with normal saline. Clinical outcomes were good with correction of hyponatremia in all. **Conclusion:** True hyponatremia mainly occurs in patients with renal failure in our setting. Outcomes are good with appropriate management. **Key-Words:** Hyponatremia, aetiologies, treatment, outcomes, Yaoundé.

Relapse of Goodpasture's Syndrome Double Positive in a Hemodialysis Patient: Case Report

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Objective : The aim of this work is to highlight the importance of knowing both evolution and prognosis of patients with double-positive Goodpasture's syndrome associating anti-GBM and anti-neutrophil cytoplasmic antibodies (ANCA). **Methods :** We report a case of a double positive Goodpasture's syndrome that relapsed in less than 06 months under treatment with an isolated pulmonary involvement. **Results:** A 70-year-old man with no significant medical history, a former smoker, stopped smoking 8 years ago, was admitted in our Nephrology department for acute anuric renal failure. The patient received several sessions of hemodialysis and during his hospitalization his clinical history was complicated by an intra-alveolar hemorrhage with blood-stained sputum. A pneumo-renal syndrome was suggested and a complete immunological assessment was done for that the diagnosis of vasculitis with anti-GBM antibodies associated with pANCA was confirmed. Renal biopsy revealed a crescentic glomerulonephritis with linear IgG deposition of the glomerular basement membrane and 80% glomeruli in "sealing bread" conformation. Despite extensive treatment with systemic corticosteroids and immunosuppressants, the patient remained on regular hemodialysis. Plasma exchange therapy was not done at this time. About two months after starting the hemodialysis sessions, he was admitted with acute respiratory distress syndrome associated with severe anemia. The diagnosis of relapse of Goodpasture's syndrome was made. The patient received IV Methylprednisolone with oral Prednisolone, and doses of Cyclophosphamide and at that time sessions of plasma exchange therapy were started. We noticed a complete recovery of his pulmonary involvement. **Conclusion:** As illustrated in the observation, double-positive Goodpasture's syndrome occurs frequently in elderly patients. It might be correlated to a worst prognosis with severe renal involvement, and it could be associated with high risk of relapse. There are no obvious reported cases of relapse with isolated lung involvement in chronic dialysis patients. The management including the association of plasma-exchange, corticosteroids, and cyclophosphamide often achieves remission.

Hypertension in autosomal dominant polycystic kidney disease: instead inhibitor: Renin-angiotensin system?

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Objective: The aim of our work is to determine the prevalence, management and impact of hypertension in the PKD patients, and describe the effect of nephroprotective treatment on the progression of renal function (FR) in patients with PKD. **Materials and Methods:** Retrospective study of 283 cases of PKR followed in service (2000 to 2013), the follow-up period exceeds one year. We determined the prevalence of hypertension and its influence on the FR. We compared the evolving profile of the RF and blood pressure (BP) between group which received RAS blockers and the second group which doesn't receive didn't not receive. **Results:** The mean age was 48.81 ± 16.62 years, 142 men and 141 women. Hypertension was noted in 168 patients, a prevalence of 59.4%. The average systolic BP was 164 ± 20 mmHg and mean diastolic BP was 92 ± 14 mmHg. Hypertension was systolic and diastolic in 67.3% of cases, systolic in 32.2% and diastolic in 0.5% of cases. The anti-hypertension treatment is based on angiotensin converting enzyme (ACE) inhibitors, calcium channel inhibitors, angiotensin II receptor antagonists, diuretics, beta-blockers and central antihypertensives treatment in respectively 45.8%, 24.4%, 17.8%, 5.4%, 4.2% and 2.3% of cases. The BP is within the recommended target ($<140/90$ mmHg) in 55% of cases, with BP control in a median 3 months. Fifty percent, 22.6% and 8.3% of patients was respectively treated by one, two and three medications. Hypertension was a risk factor associated with the degradation of the RF in the PKD ($p = 0.044$). The analysis of the blood pressure profile and FR between the 2 groups with and without RAS inhibitor showed no statistically significant difference in the short and long terms. **Conclusion:** Hypertension is a common complication and fearsome gravity during the PKD. The effect of RAS inhibitors on the evolution of the RF in PKD is still controversial, their beneficial effect on other risk factors, especially hypertension and proteinuria is confirmed.

The influence of the PKD gene on the clinical presentation of the Autosomal dominant polycystic kidney disease: Case presentation

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Objective: To describe a case of late discovery of autosomal polycystic kidney disease. Autosomal dominant polycystic kidney disease (ADPKD) is the most common monogenic hereditary renal disease. It usually reveals itself in adulthood and is characterised by the progressive development of multiple and bilateral cysts in the kidneys and other organs. Mutations in the two genes PKD1 and PKD2 are responsible for about 80 to 85% and 10 to 15% of cases respectively. **Patients and methods:** We are reporting the case of 60 years old B M, with no contributive past history, 3rd in a family of 13 who was diagnosed of PKD in the context of abdominal pain and incisional hernia. The diagnosis of PKD was based on radiological findings. It is Worthnoting that the patient had neither hypertension nor renal failure. As concerns the family history; the father died at the age of 83years and was on hemodialysis for unknown reason, 2 sisters have ADPKD ; one who is 65 years old with hypertension and moderate renal failure and the other who is 51years old, hypertensive but no renal failure. The rest of the family is currently being screened. **Discussion:** Autosomal dominant polycystic kidney disease is characterised by a variable progression of the kidney disease which is observed both within (intrafamilial) and without (interfamilial) the families affected. The challenge today is to predict outcome of the disease in every patient in order personalise the management. In our patient, it is most likely the PKD2 gene regarding the benign clinical presentation. **Conclusion:** The majority of patients with ADPKD will evolve , at different speeds, towards end stage renal disease. It is therefore of primordial importance to identify the "Progressor" patients.

Urinary infection in autosomic dominant polycystic kidney disease: Epidemiological profile, bacteriological, therapeutic and evolution.

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Objective: The aim of our study was to determine the prevalence, management therapeutic and impact of UI on renal function during the ADPKD. **Materials and Methods:** Retrospective study including 283 cases of PKAD followed between 2000 and 2013 with a follow-up more than a year. We analyzed the clinical, biological, treatment and outcome of patients. Have been selected patients with a UTI confirmed by cytobacteriological urinary analysis. **Results:** Sex-ratio was 1,01, the average age was 48.81 ± 16.62 years. Fifty six patients had one or more episodes of UTI or a prevalence of 19.8%. The circumstances of discovery are: burning sensation when urinating (60%), lower back pain (87.5%) and fever (9%). It was a single episode in 36 patients and recurrent infections in 20 patients (35.7%). Thirty-six patients had a single episode and 20 had recurrent infection (2 episodes in 11 cases, 3 episodes in 4 cases 4 episodes in 3 cases and 6 episodes in 2 patients). Infectious agents involved were: *Escherichia coli* (57%), *Klebsiella pneumoniae* (17.5%), *Proteus mirabilis* (3.5%), *Streptococcus agalactiae* (7%), *Staphylococcus saprophyticus* (9%), *Acinetobacter baumani* (1,7%) and *Pseudomonas aeruginosa* (1.7%). We noted two cases of urinary tract infections with *Candida albicans*. Antibiotic treatment received is ciprofloxacin (71.4%), trimethoprim-sulfamethoxazole (14.3%), ceftriaxone (9%) or amoxicillin-clavulanic acid (1.7%); the outcome was favorable in all patients. We found no significant relationship between the UI and the deterioration of kidney function ($p = 0.9$). Female sex does not appear as a risk factor of UTI ($p = 0.13$). **Conclusion:** An Early and appropriate management of UTIs during the ADPKD is necessary given their frequency and recurrent character.

Goodpasture disease (renal type): a case presentation

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Objectives : To report a case of renal-limited Goodpasture disease. **Patients and methods:** We are report the case of a 28 year old male who presented with a rapidly progressive renal failure, microscopic haematuria and normocytic anaemia. Extra-capillary glomerulonephritis was diagnosed on renal biopsy. circulating anti-GBM antibodies were present in serum. The treatment consisted of plasmapheresis every other day, alternating with haemodialysis, boluses of corticoids and immunosuppressive cyclophosphamide. The renal outcome was not favourable, the patient is on chronic haemodialysis. **Discussion:** Goodpasture syndrome is rare. Early initiation of treatment leads to favourable outcomes but the presence of renal failure requiring dialysis on diagnosis is a poor prognostic factor. This is the case of our patient with a poor renal outcome despite the early onset of management. **Conclusion:** Renal limited Goodpasture disease accounts for about a third of all cases. The early initiation of treatment is an important aspect in the prognosis, especially in preventing endstage renal failure. Relapse is rare and treatment is over many months.

Support for iron deficiency in the treatment of anemia in pre-dialysis.

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Objective: The objective of our work is to determine the prevalence of iron deficiency and anemia in pre-dialysis patients and the potential for treatment by intra-venous (IV) iron compared to the oral form. **Patients and Methods:** It is a prospective observational study conducted over 2 years including all chronic renal failure patients with GFR less than 60 mL / min / 1.73 m² followed in our center. Absolute iron deficiency corresponding to low iron store is defined by a serum ferritin <100 ng/ml with a transferrin saturation (TS) 100 ng/ml with a TS<20%. Anemia is defined by hemoglobin (Hb) level less than 13g/dl in men and 12g/dl in women as defined in the 2012 KDIGO. The treatment consisted in supplementation either IV iron sucrose or iron sulfate orally. **Results:** Over 2 years, we identified 143 patients. The mean age was 61.2 ± 16.3 years. At admission, Iron deficiency was noted in 103 patients (72%). It was absolute in 61 patients and functional in 42. This prevalence increases with the stage of CKD. Anemia was present in 91% of patients. Iron was given as an injection in 88 patients and orally in 55. We compared the clinical and laboratory parameters and treatment response between oral iron and IV iron groups. Comparing the two groups showed a significant increase in Hb (p=0.045) and the iron status (p = 0.021) in the 3rd month in the group treated by injectable iron. This increase is significant at 24 months of evolution. Correction of iron status has reduced doses of EPO necessary for the correction of anemia. **Conclusion:** In patients followed for predialysis CKD, the administration of injectable iron improve iron status and hemoglobin levels early and persistently compared to oral iron.

Rituximab as maintenance therapy for ANCA associated vasculitis: a case report

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Objective: The objective of our observation is to prove the efficiency of Rituximab as maintenance therapy for ANCA associated vasculitis. **Patients and methods:** We report the observation of a 36 years old man who was admitted to our department of nephrology for the management of rapidly progressive glomerulonephritis. He was clinically diagnosed to have granulomatosis with polyangiitis (Wegener's disease) based on a pneumo-renal syndrome with rapidly progressive glomerulonephritis and alveolar hemorrhage, the anti-neutrophil cytoplasmic antibodies (pANCA) were positive. As induction therapy: intravenous Rituximab (1 g/15 days) was used in addition to corticosteroids and plasma exchanges followed by maintenance therapy using semi-annual cures of Rituximab (1g/6 months). **Results:** A complete pulmonary and renal remission (normalization of renal function) was obtained. One year later it still no relapse and the tolerance of the treatment is well. There were no infectious or neoplastic complications are observed to date. **Conclusion:** Rituximab has been shown to be effective and safe for use as maintenance therapy in ANCA associated vasculitis but the prevention of relapses at a distance remains the major therapeutic challenge.

New case of sarcoidosis associated with membranous nephropathy

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Objective : To report a case of sarcoidosis associated membranous nephropathy

Case : We report the case of a 46-year-old female patient with pulmonary localization of sarcoidosis who presented impure nephrotic syndrome under corticosteroid therapy. A first renal biopsy performed resulted in a membranous nephropathy type I requiring the introduction of a ciclosporin-based immunosuppressive treatment. The evolution was marked by an aggravation of the renal function in 2 years with a GFR going from 64ml / min to 24 ml / min motivating a second renal biopsy recovering an evolution of the membranous nephropathy towards the type 2 with presence of Chronic tubulo-interstitial lesions and hyaline arteriolopathy that may be related to chronic drug toxicity of cyclosporin.

Conclusion: The glomerular renal affection remains an exceptional location of the sarcoidosis which can be potentially serious given the risk of irreversible renal failure. The pathophysiological mechanisms at the origin of glomerular lesions during sarcoidosis remain hypothetical and Membranous nephropathy is the most frequent.

Can exercise induced albuminuria be used as a marker of early circadian blood pressure abnormalities in sub Saharan type 2 diabetes individuals.

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Objective: In the search of earlier markers of diabetic nephropathy, we aimed to investigate the relationship between exercise-induced albuminuria and circadian variations of blood pressure in sub Saharan type 2 diabetes individuals. **Methods:** This was a cross-sectional study in type 2 diabetic patients with diabetes duration of less than 5 years, HbA1c < 7%, blood pressure < 140/90mmHg and without history of hypertension and anti-hypertensive medication; without clinical proteinuria, and a normal creatinine clearance. In all participants, we performed an ambulatory blood pressure measurement (ABPM) over 24 hours, a resting ECG, a measured of albumin to creatinine ratio (ACR) at rest and after 30 minutes of a standardized treadmill exercise. **Results:** we enrolled 27 consenting type 2 diabetes patients with a mean age 52±4 years, HbA1c 6.3±0.5%, clinical systolic BP (SBP): 125±12mmHg and diastolic BP (DBP): 86±09mmHg. Using ABPM, we found that diurnal and nocturnal SBP were 128±17mmHg versus 123±19mmHg (p = 0.004); DBP: 83±11mmHg versus 78±14mmHg (p=0.002) respectively. The median (interquartile range) ACR at rest was 23 (10-51) mg/g versus 35(23-80) mg/g and after exercise (P<0.001). Patients with resting albuminuria ≥ 30mg/g had higher nighttime BP than those with no abnormality (SBP: 130 vs 115mmHg, p=0.06; DBP: 86 vs 72mmHg, p=0.02 and mean arterial BP: 107vs 90mmHg, p=0.03). Similarly, subjects with exercise albuminuria greater than 30mg/g had significantly higher nocturnal BP on ABPM (SBP: 128 vs 110mmHg, p=0.03; DBP: 83 vs 66mmHg, p=0.04 and mean BP: 106 vs 83mmHg, p=0.02). Finally, we compare patients exhibiting exercise induced albuminuria without resting albuminuria to those having albuminuria at rest in order to check if there is a difference between BP profiles of these two groups of patients. Comparing to non albuminuric patients, these two groups have elevated BP values. But while compared one another, Patients with moderate resting albuminuria tend to have a higher BP values than those presenting only exercise-induced albuminuria (86 vs 83mmHg, p=0.03). **Conclusion:** Our findings are consistent with the fact that exercise-induced albuminuria is associated with less important nocturnal abnormalities of BP than resting albuminuria suggesting that this could be used to detect early abnormalities of nighttime BP. This association could be of importance since little variations of nocturnal BP has been associated with renal injuries in type 2 diabetes patients. Therefore exercise induced albuminuria could be useful to discriminate individuals with subclinical diabetic nephropathy

Fabry Disease: Clinical & Biochemical approach in a cohort of 51 Algerian patients

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Objective: The aim of this study was to determine the prevalence of renal disease in Fabry disease (FD), to specify its relationships to other organ lesion and finally to assess the efficacy of enzyme replacement therapy (ERT). **Materials and Methods:** This is a monocentric longitudinal descriptive study carried out between 2013 and 2015. A total of 16 families were included in the study, mostly originating from the East and Centre regions of Algeria. FD diagnosis was made by the measurement of enzymatic activity of α -Gal A and confirmed par the genetic study of GLA gene. **Results:** 51 patients had a confirmed diagnosis (30 men, 15 women, 02 boys and 04 girls). Among them 36 were symptomatic (30 men, 03 women, 02 boys, 01 girls) and 15 were free of any symptom at the time of the study. The mean age at experiencing first symptoms was 14 years (extremes 04-51 years) and the mean time to diagnosis was 19 years (extremes 02- 41 years). The clinical presentation in symptomatic patients was made of Classic phenotype in 27 patients, Renal variant in 08 patients and Cardiac variant in 01 heterozygous female. At diagnosis, renal lesion was present in 28 of the symptomatic patients (78%), and men were the most affected (78% of patients with renal lesions). ERT was started in 2013 in 22 symptomatic patients. There was an undeniable improvement in their quality of life, and a relief of neurologic and vascular symptoms. **Conclusion:** This represents the entry of orphan diseases related to LSD in our local Nephrology practice. FD remains largely unknown in our country and so much still needs to be done.

Plasma exchange as a treatment of severe systemic necrotizing vasculitides

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Objective : The objective of this study is to describe indications, efficacy and safety of plasma exchanges for the treatment of systemic necrotizing vasculitides even if the use of plasma exchange in systemic necrotizing vasculitides still need to be codified. **Patients and methods:** It is a retrospective study including 8 patients with systemic necrotizing vasculitides, admitted to service of nephrology carried out between June 2015 to July 2016 and who benefited from plasma exchange in combination with high doses of corticosteroids and immunosuppressive agents. We analyzed the clinical-biological data, the indications, the complications and the impact of plasma exchanges on the vital and renal prognosis. **Results:** 8 patients were included (5 men, 3 women), the mean age was 36 years (9-64). Diagnoses of patients were: Microscopic polyangiitis (n=4), Granulomatosis with polyangiitis (Wegener) (n=2), Eosinophilic granulomatosis with polyangiitis (Churg syndrome and Strauss syndrome) (n=1), and Periarthritis nodosa (n=1). The indication for plasma exchange was the severe forms of the disease. The median number of plasma exchange sessions was 5 (4-6). Remission was total in 3 cases and partial in 4 cases. One patient died. **Conclusion:** Plasma exchange is effective in the treatment of severe forms of systemic necrotizing vasculitides because it improves renal and vital prognosis of patients in the short and medium term.

Prognostic value of furosemide stress test in acute kidney injury due to severe malaria

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Objective: This study aimed to assess the prognostic value of FST on renal function and need for renal replacement therapy (RRT) in AKI patients with SM-AKI. **Methods:** A prospective cohort of 53 patients with SM-AKI admitted between 15th June and December 15th 2016 at emergency department of Saint-Louis university hospital. AKI was defined according to KDIGO guidelines. FST was performed in all patients by measuring urine output 2h after intravenous furosemide (at dose of 1.0 mg/kg or 1.5 mg/kg). Clinical and biological parameters at admission, number of hemodialysis sessions and outcomes were collected from patients' medical records. Progression of urine output and serum creatinine, need for RRT, and mortality within 30 days were compared in patients according to FST results. Data were analysed using Stata 12.0. **Results:** Mean age of patients was 35±21 years and sex-ratio 1.2. The mean APACHE II score was 18.2 and mean serum creatinine and urine output were 2.6 mg /dL at admission. Patients with positive FST response had significantly lower need for RRT, higher rate of renal recovery but similar mortality compared to those with a negative response. After adjusting for age, sex, APACHE score, baseline serum creatinine, FST remained independently associated with renal recovery (OR= 2.4 ; 95% CI= 1.3 - 16.5), need for RRT (OR= 0.7 ; 95% CI= 0.2 - 0.9). However, it was not associated to death (OR= 0.9 ; 95% CI= 0.1 - 8.3). **Conclusion:** The FST was independently associated with renal outcomes but not mortality in patients with severe malaria. Further research is needed to assess the validity of these findings.

The performance of novel acute kidney injury biomarkers in diagnosis and predicting outcomes in cardiorenal syndrome

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Objective: To study the performance of novel acute kidney injury biomarkers in diagnosis, and predicting outcomes in patients with Cardio-renal Syndrome type 1 (CRS-1). **Methods:** We conducted a prospective cohort study from January-March 2016 in the Cardiology Units of Yaounde. Consenting adults admitted for congestive heart failure (CHF) were enrolled and followed up till hospital discharge or death. Patients with chronic kidney disease and other causes of AKI were excluded. Serum creatinine (SCr), kidney injury molecule (KIM-1) and retinol-binding protein 4 (RBP4) were measured on admission, after 48 hours and on day 7. Biomarker assays were performed at the Biotechnology Center of the University of Yaounde 1 using a Luminex system. Outcomes of interest were need for dialysis and mortality. CRS-1 was defined by the KDIGO 2012 criteria. Receiver operating curves (ROC) were used to evaluate performance. **Results:** A total of 40 (52.5%) females subject were enrolled, with mean age of 66.4±14.3 years (range: 33-93). The mean systolic ejection fraction was 38.1±17.81%. The incidence of CRS-1 was 40% (SCr), 45% (KIM-1), and 37.5% (RBP-4) respectively. Compared to SCr, KIM-1 had a good diagnostic performance (AUC-ROC: 0.725, sensitivity of 65% and specificity of 70% p=0.017) unlike RBP-4. (AUC of 0.596, sensitivity of 44% and specificity of 73%, p=0.31). The performance of both novel biomarkers was comparable to SCr in predicting the need for dialysis while only RBP-4 compared favorably to SCr in predicting mortality. **Conclusion:** Novel AKI biomarkers may be useful in diagnosis and predicting outcomes in CRS-1, however the performance is heterogeneous across biomarkers. Further studies are necessary to better categorize these biomarkers according to AKI category. **Key words:** Cardiorenal syndrome, congestive heart failure, creatinine, KIM1, RBP4

Apolipoprotein L1 genetic variants: the culprit in the increased prevalence of non-diabetic chronic kidney disease demise among Cameroonians

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Objective: The purpose of this study was to determine if the apolipoprotein L1 (APOL1) genetic variants are associated with non-diabetic chronic kidney disease (CKD) among Cameroonians. **Methods:** 179 non-diabetic case/control Cameroonian samples with no European admixture matched for age, sex and comorbidity were genotyped by real-time PCR for the Apolipoprotein L1 risk variants at the Faculty of Health Sciences of the University of Cape Town, South Africa and at the National Centre for Filariasis and other Tropical diseases, Yaoundé Cameroon. Cases were all patients with either biopsy proven or clinically diagnosed non diabetic kidney disease. Controls were patients with one of the corresponding (with the cases) risk factors for chronic kidney disease who had a normal kidney function (serum creatinine < 14mg/l and normal urine dipstick). **Results:** We observed a high frequency of the two risk alleles in the control group (12.7%). The two APOL1 risk allele frequency was 26% in the case (non-diabetic CKD) group. Under the recessive inheritance model, we observed a significant association between non-diabetic CKD and the two APOL1 genetic variants with an OR of 2.42 (p = 0.027). We observed an even greater association between the APOL1 G1 risk allele in the recessive inheritance model and non-diabetic CKD with an OR 4.91 (p = 0.001). **Conclusion:** APOL1 genetic variants are common in the Cameroonian population and significantly increase the risk of non-diabetic CKD in this population. APOL1 may be the actual culprit for the sudden rise in the prevalence of CKD in the Cameroonian population. **Key words:** Apolipoprotein L1, non-diabetic chronic kidney disease, Cameroonians

Apol 1 susceptibility gene variants among treatment naive HIV positive patients and its association with kidney disease at Kano Nigeria

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Objective: We investigated the prevalence of Apolipoprotein L1 (APOL 1) susceptibility genes G1 and G2 and their association with presence of kidney disease (defined as persistent proteinuria and/or raised eGFR) among ART naive HIV positive patients in Kano. Apol1 genes G1 and G2 were shown to be associated with development of kidney disease especially HIVAN among African Americans although not much have been reported Among Black Africans especially from this part of the world. **Methods:** DNA samples obtained from the whole blood of 118 participants, 18 HIV positive patients with kidney disease (positive CKD), 50 HIV positive patients with no evidence of kidney disease (positive no CKD) and 50 HIV negative with no kidney disease (negative no CKD), were genotyped for APOL1 G1 and G2 variants. **Results:** The prevalence of G1 was 11%, 18%, and 30% respectively among positive CKD, positive no CKD and negative no CKD groups respectively. Similarly, the prevalence of G2 was 27%, 8%, and 20% respectively among positive CKD, positive no CKD and negatives no CKD groups. 44%, 39% and 17% of the CKD positive group had none of the alleles present, at least one risk allele present and all the two risk alleles present respectively. Similarly, 76% and 24% of the positive no CKD group had none of the alleles present and at least one risk allele present respectively and none had the two risk alleles present. While among the negative no CKD group, 54%, 42%, and 6% had none of the alleles present, at least one risk allele present and all the two risk alleles present respectively. There was a statistically significant difference in the presence of any of the risk alleles between those who are positive with CKD and those positive with no CKD (chi= 5.76, p=0.02). There was no significant difference compared to negative with no CKD group (Chi= 0.5, p= 0.47). **Conclusion:** This study showed high prevalence of high risk alleles of Apol1 gene among treatment naive HIV positive patients with CKD in our environment. Further studies comparing the histological types of kidney disease and the Apol1 gene alleles is recommended.

Diagnostic Accuracy of Neutrophil Gelatinase-Associated Lipocalin for early detection of Acute Kidney Injury among Patients in Intensive Care Unit in a Tertiary Hospital in Nigeria

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Objective: The study aims to determine the diagnostic accuracy of NGAL for early detection of AKI among adult critically-ill patients in a tertiary Hospital in Nigeria. It will also determine the sensitivity, specificity, positive and negative predictive values of NGAL for AKI among these patients. **Methods:** This is a prospective study of 89 critically-ill adult patients, and 89 age- and sex-matched apparently healthy individuals. Serum creatinine were measured at admission and after 48hours, while serum NGAL was measured at admission using ELISA-based turbidimetric assay. AKI was defined by Acute Kidney Injury Network (AKIN) criteria. The pattern of serum NGAL, the diagnostic accuracy for AKI, and the relationship between serum NGAL and the duration of admission was determined. **Result:** The mean ages of the patients and control participants were 40±13years and 36±15years respectively ($p = 0.067$). 42.7% of the patients developed AKI (Stage 1, 57.9%; stage 2, 36.8% and stage 3, 5.3%). The Median serum NGAL was significantly higher in the patients (120 (10-380)ng/ml) than the control participants (29(10-98)ng/ml, $p = 0.001$). At the serum NGAL cut off of 135ng/ml, the sensitivity of NGAL for AKI was 94.74% and the specificity was 92.16%. The positive and negative predictive values were 90% and 95.90% respectively. The diagnostic accuracy was 93.26%. The admission serum NGAL strongly correlated with the duration of admission ($r = 0.786$; $p = 0.001$). Serum NGAL at admission correlated with serum creatinine taken 48hours after admission than serum creatinine at admission. **Conclusion:** Serum NGAL is an early predictor of AKI compared with serum creatinine among adult critically-ill patients in a tertiary hospital in Nigeria, and may be a useful marker of outcomes in these patient population. **Key words:** Neutrophil Gelatinase-Associated Lipocalin, Acute Kidney Injury, Intensive Care Unit, Nigeria.

Acquired Cystic Kidney Disease in haemodialysis patients, single center study in Morocco

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Objectives: Our study aimed to determine the prevalence of ACKD in our dialysis ward, its risk factors and evolution. **Patients and methods:** It's a cross-sectional study on 108 dialysis ward patients in the UH of Casablanca, Morocco. Patients with Polycystic Kidney Disease were excluded. We explored native kidneys with ultrasonography. Diagnosis of ACKD was made by the identification of at least 4 simple cysts on each kidney, with atrophic kidneys. We analysed patients demographic, clinico-biologic, radiologic and dialytic data. **Results:** ACKD prevalence was 26,85% (29 patients). Median age was 48,4 [25-93] years, sex ratio was 17M/12F. Median dialysis period was 198 [108-348] months. Causal nephropathy was unknown in 69% of cases, chronic glomerulonephritis in 17%, interstitial nephritis in 10% and diabetic nephropathy in one patient (3,4%). Median diameter of cysts was 22,9 [13-27] mm. A fifth of our patients complained about low back pain. None of them experienced hematuria, intracystic haemorrhage or intracystic infection. No cancers were detected. These patients had higher hemoglobin levels (10,67g/dL versus 9,23g/dL in non ACKD patients) without need of transfusion or ESA treatment. **Conclusion:** ACKD is frequent among dialysis patients with an increasing prevalence with dialysis duration. Annual screening with ultrasonography is mandatory for early detection of malignant transformation.

Intradialytic hypotension and associated factors among patients on maintenance haemodialysis

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Objectives: Determine the incidence and associated factors of intradialytic hypotension (IDH) among patients on maintenance haemodialysis in Douala. **Method:** We conducted a prospective longitudinal study in the haemodialysis unit of Douala General Hospital, including patients with end stage kidney disease on maintenance haemodialysis for more than one month. During 5 weeks, at each haemodialysis session, patients were followed up: blood pressure was measured hourly and clinical events possibly related to IDH (cramps, asthenia, dizziness, head ache, nausea, vomiting, fainting) were recorded. IDH was defined as a decrease in systolic blood pressure ≥ 20 mmHg or a decrease in mean arterial pressure ≥ 10 mmHg, associated to a clinical event during dialysis. The incidence of IDH was expressed as the number of treatments in which IDH occurred per 100 haemodialysis treatments. Logistic regression was used to determine associated factors to IDH and a p value < 0.05 was considered statistically significant. **Results:** We included 104 patients (69 male) with a mean age of 50.74 ± 15.18 years. Hypertension (95.2%) and diabetes (30.8%) were the main comorbidities. During the study period a total of 1032 haemodialysis sessions were followed with a mean of 9.88 ± 1.57 per patient. The incidence of IDH was 11.6 episodes per 100 haemodialysis sessions. In all, 43 (41.3%) patients presented at least one episode. Most clinical manifestations encountered were asthenia (31.8%) and cramps (24.2%). Independent associated factors were: female sex (aOR=3.93; CI: 1.4-11.03; $p < 0.009$), and the intake of antihypertensive drugs during or within the 2 hours preceding dialysis (aOR=1.25; CI: 1.09-1.44, $p < 0.002$). **Conclusion:** Intradialytic hypotension was not a rare phenomenon amongst patients on maintenance haemodialysis in our setting and associated factors were female sex and intake of antihypertensive drugs during or within the 2 hours preceding dialysis

Evaluation of the physical activity of chronic haemodialysis patients at CHU Aristide Le Dantec of Dakar (Senegal)

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Objectives: The objective of our study was to evaluate physical activity in chronic haemodialysis patients and to determine the factors that hinder it. **Patients and Methods:** This is a cross-sectional study conducted from December 1, 2015 to January 30, 2016. We included all patients haemodialysed for at least 6 months in the haemodialysis unit of CHU A. Le Dantec. physical activity of patients was assessed using the BAECKE questionnaire. **Results:** One hundred patients were included. The mean age was 47.7 ± 14.68 years with a female predominance (sex ratio: 0.96). The dominant causal nephropathy was nephroangiosclerosis found in 47% of cases. The mean duration of haemodialysis was 55.8 ± 35.99 months (range: 6 months and 180 months). The median work activity index was 2.31. It was low in 61.1% of patients. The median sport activity index was 2.25. It was low in 79% and elevated in 21% of cases. The median index of recreational activity was 2.00. It was also low in 79% and elevated in 21% of cases. Overall physical activity was limited in 77% of patients. The decrease in PA was significantly correlated with low Kt / v ($p = 0.015$). On the other hand, the decrease in PA was not correlated with age, sex, BMI, seniority in haemodialysis, hypertension, diabetes, anemia, Hyperparathyroidism. **Conclusion:** The low level of PA in chronic haemodialysis patients in our study underscores the need for targeted and adapted physical activity programs in these patients. **Key words:** Physical activity, haemodialysis, Dakar.

Cardiac Arrhythmia in Patients on Chronic Haemodialysis in Cameroon: A Cross-Sectional Holter ECG Study.

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Objective: To describe the occurrence, severity, and risk factors of cardiac arrhythmia in patients with ESRD in our setting. **Methods:** We carried out a cross-sectional study in the haemodialysis units of two regional hospitals in the cities of Maroua and Garoua, Cameroon. Over a four month period in 2015, we consecutively recruited consenting adult patients on maintenance haemodialysis for at least three months. A 24-hour Holter ECG monitor was placed just before dialysis. Ventricular arrhythmia was classified according to Lown classification. **Results:** A total of 30 participants (63.3% males) were included in the study. Their mean age was 42 ± 15.7 years (range 30 – 67 years). Hypertension was the most frequent co-morbid condition seen in 21 (70%). On standard ECG, 25 (83.3%) were in normal sinus rhythm while 5 (16.7%) had sinus tachycardia. The mean Ejection Fraction (EF) was $64.4 \pm 15\%$, and ranged from 32 to 83%. The most frequent finding was pericardial effusion (46.6%). The overall average heart rate was 85.7 ± 14.8 bpm, and ranged from 62 to 120 bpm. The most frequent arrhythmia on Holter ECG was PVC of varying degrees seen in 26 (86.7%) of patients. This was followed by Supraventricular Premature contractions (21, [70%]), which were all junctional in origin. Of those with PVC, 12 (46.2%) had complex arrhythmia. Six (20%) patients had salvos of Premature Ventricular Contractions (PVC). **Conclusion:** Complex Premature ventricular contractions frequently occurred in patients on maintenance haemodialysis. This was associated with left ventricular systolic dysfunction. This stresses the need for a comprehensive cardiac evaluation including Holter-ECG recordings this group of patients.

Reverse epidemiology of stroke in Congolese chronic haemodialysis Patients: a retrospective cohort study

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Objective: Conventional risk factors of cardiovascular diseases are common in dialysis Patients, but often in an opposite direction. We aimed to determine the risk factors of stroke in Congolese Patients receiving chronic haemodialysis. **Methods:** Retrospective Cohort Study was conducted in two centers haemodialysis of Kinshasa between 2010 and 2013. The Cox regression assessed adjusted difference in stroke risk, a multivariate analysis was also performed. **Results:** Among 191 patients, 12 cases of stroke (8 cerebral infarction and 4 cerebral hemorrhages) were observed during 1692.3 total patients-months follow up. The cumulative incidence of stroke was 7.4 per 1000 patients-months. The conventional risk factors (tobacco, diabetes, alcohol, dyslipidemia, hypertension, obesity, age) didn't predict the onset of the stroke. Normohypertensive or lack hypertension status was the significant predictor factor associated to stroke with an odds ratio of 5.7 and a 95% confidence interval from 1.52 to 21.42. **Conclusion:** Incidence of stroke is higher in Congolese Patients receiving haemodialysis. It is associated with a Normohypertensive status, suggesting the reverse epidemiology.

Valvular calcifications in chronic haemodialysis in Kinshasa

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Objective: valvular calcifications constitute one of the major cardiovascular complications of the haemodialysis due to its prevalence and its predictive morbidity and mortality. However, few epidemiological studies in the DRC have investigated this prevalence and associated risk factors. **Methods:** This was a cross-sectional, multicentric, descriptive and analytical study that included 60 adult patients haemodialysed for at least 6 months in three haemodialysis centers in Kinshasa and who have benefited a transthoracic echocardiography during the year 2016. Multivariate logistic regression analysis was used to investigate the determinants of valvular calcifications. **Results:** The mean age of patients was 52 ± 15.9 years with 43 men and 17 women. The duration in HD was 15.1 ± 3.7 months. The mean serum calcium level was 7.9 ± 1.3 mg / dL, the mean phosphoric acid level was 5.7 ± 1.7 mg / dL. From a therapeutic point of view, 5.8% of the patients were under phosphorus chelators and 36.5% under calcium supplement and vitamin D. The prevalence of calcifications was 38.3% with aortic valvular location at 63.6% and mitral 22, 7%. In multivariate analysis, hypertension (adjusted OR 4, $p = 0.026$), age > 60 years (adjusted OR 4, $P = 0.012$), tobacco (adjusted OR 5, $p = 0.039$) and hyperphosphoraemia (adjusted OR 2, $p = 0.011$) were associated with the occurrence of calcifications. **Conclusion:** This study demonstrates that the prevalence of valvular calcifications in haemodialysis patients in Kinshasa remains high and is associated with several risk factors. As this is a known cause of morbimortality, prevention, early detection and regular monitoring of complications are essential for adequate management.

Placement of tunneled haemodialysis catheters under brightness enhancer: The impact on our practice

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Objective: To report an analysis of the data extracted from the "central catheterization follow-up registers". **Material and method:** In this study we report an analysis of the data extracted from the "central catheterization follow-up registers" for the period from January 2016 to December 2016 in the nephrology department of the CHU Mustapha in Algiers; This study involved a population of 87 patients, with a sex ratio of 1.13 male for 1 female, with an average age of 57 years (extremes 6 to 83 years), 101 central catheters with 64 temporary catheters and 37 tunneled Catheter. **Result:** We report 35 patients who benefited from the installation of a tunneled catheter in our department (two patients get there catheter replaced due to dysfunction); the mean age of patients with a tunneled catheter was 56.3 years (16-83). 8 patients out of 34 (17%) benefited from a catheter installed under fluoroscopy, we did use ultrasonography for all the patient, the average age of these patients was 60 years, with a sex ratio of 2 men for 6 female, all 8 patients had already undergone numerous unsuccessful attempts for blind insertion of central catheters, fluoroscopic placement allowed to understand the reasons for failure to be elucidated: - bilateral internal jugular stenosis for 1 of the 8 patients (insertion of tunneled femoral vein); - Partial thrombosis of the right jugular vein + contralateral stenosis 1 of the 8 patients (Passover the thrombus); - Aberrant path of the central vessels (angulation, unfolding of the centrals veins) more or less associated with jugular stenosis in 5 of the 8 patients (insertion after radiographic "guidance" of a tunneled catheter); - Complete thrombosis of the right innominate vein + left jugular stenosis (insertion of a catheter on the left sub-clavicular vein). **Conclusion:** In our series we find an incidence of 17% (10/34) of vascular abnormalities versus 42% (29/69) of vascular abnormalities in the Marteen's series, we also find that the major cause of insertion difficulty was the aberrant venous pathway for 14% (5/34) of our patient versus 14.5% (10/69) for Marteen's patients, the main Cause of these abnormalities is likely the association of vascular lesion.

Frequency and factors associated with rheumatic diseases in chronic haemodialysed patients

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Objectives: To determine the frequency and factors associated with rheumatic diseases in chronic haemodialysed patients. **Methods:** we conducted a cross-sectional study on patients undergoing haemodialysis over a period of at least two years at the haemodialysis Centres of the University Hospital Centre and the Yaoundé General Hospital. Data analysis described the socio-demographic, clinical and biological characteristics of the study population, followed by a bivariate analysis of associated factors. **Results:** This study included 72 patients with an average age of 47.7 ± 14.7 ans (range: 17 and 75 years); male/female sex ratio was 1.57 and an the average body mass index of 21.72 kg/m^2 . Forty nine percent of patients had undergone haemodialysis for 7 years and 66 patients (91.7%) had 2 sessions per week; 6 patients had three sessions per week. Amongst patients undergoing dialysis, arterio-venous fistula were used in 68 cases (94.4%) Rheumatic diseases were found in 57 patients (79.2%) and were as followed: 38 patients with bone metabolic disease (52.8%); 10 cases of amyloid arthropathy (14%); 12 cases of degenerative joint diseases; 3 cases of crystal arthropathy (4.2%) comprising one case of pseudo-calcinosis; Infectious cases were not found. Factors associated with the occurrence of rheumatic diseases were as followed: advanced age and an hyperparathyroidism (average PTH > 657 pg/L). **Conclusion:** Rheumatic diseases are frequent in chronic haemodialysed patients in our settings, as commonly reported in the literature. Associated factors are advanced age and hyperparathyroidism. Prevention of chronic kidney disease mineral and bone disorders with a high permeable membrane may be a preventive therapy. **Keywords:** Chronic haemodialysis, Arthropathy, Hyperparathyroidism, rheumatic diseases

Is chronic pain in the haemodialysis sufficiently managed?

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Objectives: To evaluate the prevalence, risk factors and management of chronic pain as a first step in order to provide corrective measures and to monitor the effectiveness of these measures in haemodialysis patients. **Methodology:** Study conducted in 2 steps. The first stage consisted of a cross-sectional study (September-October 2015), including 92 haemodialysis subjected to a questionnaire on the characteristics of pain. The pain was chronic if it persisted for more than 3 months. The intensity was assessed using the visual analog scale. The second step was an interventional study that included the 47 haemodialysis patients with chronic pain. It consisted of readjusting the analgesic treatment of the patients with a follow-up of 4 weeks of evaluation of the effectiveness. **Result:** The prevalence of pain was 51% with an average duration of 43 ± 29 months. It was continuous in 27% of cases and occurred frequently in 53% of cases. Its intensity was severe in 44% of cases. The osteoarticular origin was predominant (72%). Treatment included analgesics in 85% of cases with 90% of stage 1. It was considered to be of low efficiency in 40% of cases. The readjustment of the analgesic treatment concerned 100% of the patients algic of which 57% of readjustment of the dosage of level 1; 32% change from Tier 1 to Tier 2. All of these corrective actions were effective in 100% after a 1-month follow-up period. **Conclusion:** The chronic pain in our haemodialysis patients, although frequent, remains very poorly managed. A simple dosage adjustment of the analgesic of the bearing 1 or a passage of the stage 1 to 2 is sufficient to obtain a total efficiency.

Evaluation of haemorrhagic risk, use of anticoagulation and immediate haemorrhagic accidents after emergency haemodialysis

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Objective: To evaluate the risk of haemorrhage before the first emergency haemodialysis session, to determine the haemorrhagic events that occurred within the first 72 hours, and to identify the risk factors involved in these accidents. **Materials and methods:** This is a prospective study conducted from 15 October 2015 to 15 February 2016. We included all relevant patients in the hospital who required the use of an emergency conventional haemodialysis session. Patients who died during the first haemodialysis session were excluded and those who failed to obtain the full set of criteria to stratify the haemorrhagic risk were excluded. Three groups of patients were identified according to the haemorrhagic risk: Patients at low risk, moderate and high risk. The follow-up period was seventy-two hours after the first emergency haemodialysis session. **Results:** 89 patients were included. The mean age of the patients was 54 ± 18 years. The sex ratio (male/female) was 1.5. 50.6% had a history of high blood pressure, 32.2% had history of diabetes, 26.4% had history of heart disease, 9% had history of ischemic stroke and 6.8% had history of digestive haemorrhage. Thrombocytopenia was noted in 20.2% of patients. The vascular approach used was a short duration catheter in 64.8% of cases and an arteriovenous fistula in 25.3% of cases. 18.5% of patients receiving an anticoagulant during the first dialysis session. The frequency of the three groups of patients was 50.6% (low risk), 30.3% (moderate risk) and 19.1% -high risk). The incidence of haemorrhagic complications occurring within seventy-two hours after the haemodialysis session was 17.9% with transfusion use in 13.5% of cases. We found that the incidence of elderly subjects was higher in the high-risk group ($p = 0.01$), the frequency of females was higher in the high-risk group ($P = 0.03$), and the incidence of death was higher in the high-risk group ($p < 0.001$) compared to the other two Groups. **Conclusion:** the monitoring of anticoagulation in haemodialysis is not well codified due to the intervention of several clinical and biological parameters. Only a rigorous assessment of the haemorrhagic risk at admission and a prudent prescription of anticoagulation reduce the risk of haemorrhagic accidents. **Key words:** Risk, Haemorrhage, Anticoagulation, haemodialysis.

Patterns of intensive care admissions in haemodialysed patients at a reference hospital of Cameroon: an analysis of indications and outcomes

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Objectives: We aimed to determine the indications and outcomes of intensive care unit (ICU) admissions for haemodialysed patients in a tertiary center of Cameroon. **Methods:** In this case series, we prospectively enrolled all consecutive consenting CKD patients on maintenance haemodialysis admitted to the ICU of the University Hospital Center of Cameroon between 1st January 2016 to 31st December 2016. Variables studied were co-morbidities, adherence to haemodialysis, indications of admission and outcomes of ICU admission. **Results:** A total of 16 haemodialysed CKD patients (13 males) with mean age of 53.7 ± 14.5 years were admitted into the aforementioned ICU during the study. The frequency of co-morbidities was; Hypertension (13), type 2 Diabetes Mellitus (03) and HIV/AIDS (03). Indications for ICU admission were; uraemic encephalopathy (10), severe hyperkalaemia (08), severe sepsis (05), hypertensive emergency (03) and poorly tolerated severe anaemia (03). All patients with uraemic encephalopathy had a poor adherence to haemodialysis. Ten patients had a fatal outcome. **Conclusion:** Our findings suggest that poor adherence to maintenance haemodialysis is a major reason for ICU admissions in CKD patients. This leads to a significant morbidity and mortality. **Key Words:** Haemodialysis, Indications, Outcomes, ICU, University Hospital Center

Physical disability in haemodialysis: prevalence and risk factors

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Objectives: Our goal is to assess the prevalence of physical disability and its risk factors in our haemodialysis in order to establish an appropriate management program. **Methods:** A monocentric, cross-sectional descriptive and analytical study between November and December 2016 at the haemodialysis center of the Ibn Rochd Hospital in Casablanca, Morocco. Physical disability was assessed on the Rosser scale. Logistic regression researched the predictors of no or slight physical disability (Rosser <3) vs moderate to maximum (Rosser ≥ 3). P value was set to 0.05. **Results:** A total of 81 patients were included in the study with an average age of 44.6 years and a female predominance (53.3%). The mean duration of haemodialysis was 14.8 years. Physical disability was nil or mild at 55.6% versus 44.4% of moderate to maximum disability. In univariate analysis, predictive factors for a lower physical disability were: marital status (2% vs 0.1% $p = 0.03$), maintaining a profession (1% vs 0% $p = 0.03$), Absence of diabetes (0% vs 1% $p = 0.04$), absence of comorbidity (0% vs 2% $p = 0.04$). **Conclusion:** The rate of physical disability is not negligible in our haemodialysis patients. Groom status, physical activity, lack of diabetes and lack of comorbidity would help to maintain physical capacity.

Assesment and management of hypertension in patients on chronic haemodialysis

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Objective: Describe the diagnosis, epidemiology, and management of hypertension in dialysis patients, and examine the data sparking debate over appropriate methods for diagnosing and treating hypertension. Also we seek to determinate cardiovascular risk in hypertensive patients. **Patients and methods:** We realized a cross sectional descriptive study about 41 haemodialysis patients between october and december 2016. We determinated two groups of patients: one with high blood pressure and the second without. **Results:** The mean age of your patients was 46 years with a female predominance. The mean duration of haemodialysis was 9,8 years. The initial nephropathy was hypertensive in 9 cases. Of these 41 patients undergoing haemodialysis, 25 were hypertensive when haemodialysis started and 23 required antihypertensive treatment. 15 patients used at least one antihypertensive treatment, in 55,3% calcic inhibitor. The mean blood pressure before haemodialysis was 154/88mmhg. The mean blood pressure duration during haemodialysis was 145/81mmHg, and 141/79mmHg at the end of haemodialysis session. 44% of hypertensive patients had left ventricular hypertrophy and 6,2% had presented an ischemic cardiopathy and 67% non hypertensive patients had a normal cardiac echography. Hypertension concerns statistically significant risk of developing left ventricular hypertrophy ($p < 0,05$) Lipid profile was disrupted in 59,7% cases: 67% of hypercholesterolemia in hypertensive patients. **Conclusion:** Hypertension is a major risk factor for cardiac disease. The extra-cellular volume expansion is the main pathophysiological determinant of hypertension in haemodialysis patients. Avoiding hypertension remains a capital goal of maintenance dialysis.

Echocardiographic aspects in haemodialysis patients

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Objectives: To evaluate the different aspects of heart disease in haemodialysis patients and to identify associated risk factors. **Methodology:** Retrospective multicenter study including adult patients haemodialysis for more than 6 months and having received an transthoracic ultrasound during the year 2016. Results: A total of 146 patients were collected with a slight male predominance (50.41%) and an average age of 53.3 +/- 14.2 years. The average length of haemodialysis was 97 +/- 34 months. Chronic glomerulonephritis was the leading nephropathy (19.4%). Indeterminate nephropathy accounted for 35.30%. Cardiogram echocardiographic abnormalities were dominated: left ventricular hypertrophy (LVG) in 48.4%, valvulopathy in 41.1%, valvular calcifications in 25.6%, dilation of the left ventricle in 27.3% , Pulmonary arterial hypertension in 19.8%, pericarditis in 3.2% left ventricular dysfunction in 16.5%, relaxation disorder in 22.9%. The mean systolic ejection fraction (FE) was 61.42 +/- 6.3%. The distribution of patients in two groups according to the presence or absence of LVG showed that LVG was significantly correlated with hypertension ($p = 0.024$), in particular the mean systolic blood pressure ($p = 0.041$) Anemia ($p = 0.027$) and hyperparathyroidism ($p = 0.021$). **Conclusion:** The most common echocardiographic abnormalities in our series were LVG. It was correlated with hypertension, anemia and hyperparathyroidism.

Troponin I in asymptomatic haemodialysis patients in end stage renal disease versus controls: Troponins I are not falsely positive

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Introduction: Patients with end-stage renal disease (ESD) in haemodialysis (HD) have an increased incidence of coronary artery disease. The specificity of cardiac troponin I (cTnI) in these patients is controversial, and varies according to the studies and / or the assay method used. Our objective is to study the prevalence of high levels of cTnI in asymptomatic patients with ESD. **Patients and Methods:** This is a prospective study that included 37 asymptomatic haemodialysis patients from the department of nephrology-haemodialysis and controls hospitalized patients in the department of internal medicine, of the University Hospital of Casablanca. Patients with a history of cardiovascular or ischemic disease, severe anemia or recent infection have been excluded. The samples were made before the HD session for the first group. The cTnI assay was performed using an enzyme immunoassay method using ST AIA-PACK cTnI 3rd GEN reagent on AIA 360 (cut off: 0.04ng / ml). **Results:** The mean age of the patients was 40 years, with a slight male predominance (20H / 17F). The average HD duration was 16 years. None of the patients or controls had a cTnI level of > 0.04ng/mL. **Conclusion:** According to our results, ESD and HD did not interfere with the cTnI assay. Several other studies have confirmed the specificity of cTnI in the diagnosis of coronary insufficiency. The main reason for the controversy is the lack of standardization of the reference values for the different assay methods. Also, it should be noted that most studies report an elevation of troponin T in ESD, which can be confusing for some clinicians.

Sleep disturbances in patients on maintenance haemodialysis

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Objective: this study was designed to investigate the quality of sleep. **Methods and patients:** Data were gathered on 60 patients receiving a haemodialysis treatment. Quality of sleep was measured using the Pittsburgh Sleep Quality Index (PSQI) in dialysis patients in association with the main clinical and biochemical variables. The index is positive from 4. **Results:** The study has concerned 60 patients. Sex ratio (F/M) was 2,5. Average age was 48 years old. Duration dialysis average of 86 months. 35% of patients were diabetics and 72,5% had hypertension. 90% of our patients presented sleeping disorders. The average serum calcium was 87,09 mg/l, hyperphosphatemia was present at 58,15% of the patients. The average haemoglobin was 9,65 g/dl, the average ferritin was 680 ng/ml, the average serum albumin is estimated to 37,9 g/l. **Conclusion:** The prevalence of sleeping disorders is meaningful. It is a frequent disorder and the psychological and organic impact is réal. Its symptomatology although subjective must be prematurely recognized to act on promoting factors, allowing an active coverage to improve the quality of life of the haemodialysis patients.

Vascular complications of temporary catheters of haemodialysis

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Objective: The aim of our work is to list over a year the vascular complications that have occurred in our training.

Materials and methods: This is a 12-month retrospective study carried out in the Haemodialysis unit of Nephrology Department of the IbnSina University Hospital in Rabat. We included all patients with a vascular complication secondary to a TKT. Vascular complication was defined by the presence of deep vein thrombosis (DVT), hematoma, externalized bleeding with the TKT at its place or arteriovenous fistula (FAV). Patients with a tunneled catheter were excluded. **Results:** We collected 21 vascular complications on 483 KTT, a frequency of 4.35%. The sex ratio was 1H / 4.2F, with an average age of 47 ± 12.81 years. The median of days between laying the KTT and the diagnostic of the complication was 4 days. The complications were, in descending order, DVT (57.14%), hematoma (28.57%), Bleeding (9.52%) and FAV (4.7%). They were diagnosed by ultrasound in 14.28% of cases, and by an echo doppler in 76.19% of the cases. Two patients did not require radiological investigations. Among the 21 patients, 66.66% had chronic renal insufficiency and 33.33% had acute renal failure. The etiologies were glomerular (42.85%), vascular (28.57%), indeterminate (23.80%) or obstructive (4.76%). The hemogram found an average anemia at 6.8 ± 1.6 g / dl, while no major thrombocytopenia was noted. The evolution was favorable in 100% of our patients with medical treatment for 66.66% of the cases, surgical for 14.28% of the cases and an armed surveillance in 19.04% of the cases. **Discussion:** The vascular complications of KTT are a rare entity compared to those infectious. Yet they are severe and can lead to functional and vital prognosis. They require early diagnosis and appropriate care. **Conclusion:** This study allows us to pinpoint an important complication of KTT. Further prospective and comparative studies are needed to determine the associated risk factors.

Carpal tunnel syndrome in chronic haemodialysis: Incidence, Risk factors, Treatment and Evolution

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Objective: To evaluate the incidence of CSC and to identify the factors that influence the development of CSC in haemodialysis patients, as well as the results of its surgical treatment. **Material and methods:** Cross-sectional study carried out in December 2014 on 100 haemodialysis patients in the nephrology department of CHU Casablanca. **Results:** We collected 26 cases of CSC in 14 patients (14%). These were 9 women and 5 men (sex ratio = 0.55), with an average age of 50 years (24 -62 years). The average age at dialysis was 31 years (16 -51 years). The mean duration of haemodialysis was 19.6 years (11 - 32 years). ; And were all dialyzed with a cuprophane membrane; With an average KT / V of 1.94 (1.49-2.59). 1 patient had asymptomatic involvement of the shoulder and 2 patients had asymptomatic tendinitis as ATCD. All patients presented acroparesthesia with hypoesthesia in the median nerve area. The outcome was bilateral in 12 cases. We noted 9 cases of SCC on the side of the arteriovenous fistula (FAV). All patients underwent electromyography (EMG), confirming CSC diagnosis, with moderate to severe forms (1 case was associated with metabolic neuropathy of the median and ulnar nerves on both sides). Surgical treatment consisted of the release of the flexor retinaculum. Histology of the annular ligament and synovium revealed amyloid deposits in 1 case. The evolution was marked by the disappearance of clinical signs in all patients, recurrence in 5 cases with reoperation in 3 cases. **Discussion:** The prevalence of CSC in HDC is 9 to 32%, increases with dialysis age, and with advanced age at dialysis. The physiopathological mechanism is threefold: vascular flight in relation to FAV, uremic neuritis and amyloid deposits of the synovium. **Conclusion:** CSC is a disabling disease in HDC, requiring early screening by EMG routine screening to improve prognosis.

Outcome of HIV infected patients on maintenance haemodialysis in Cameroon: a comparative study

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Objective: To determine the outcome of HIV infected patients on maintenance haemodialysis compare to a group without HIV in the first year of dialysis in Cameroon. **Methods:** A retrospective cohort study carried out in the Douala and Yaounde general hospitals including HIV infected patients on maintenance HD between January 2007 and March 2015. They were paired with a group of patients without HIV on a 1 to 1 ratio according to age, sex, date of dialysis initiation, center of dialysis. Data collected were: socioeconomic, clinical (baseline nephropathy, opportunistic infections in dialysis, modality of first dialysis), paraclinical (hemoglobin level, CD4 count) outcome at one year and causes of death. The survival was estimated by the Kaplan Meier method and associated factors to mortality by logistic regression. $p < 0.05$. **Results:** A total of 102 patients, 51 with HIV (21 in YGH and 30 in DGH) and 51 without HIV were included. Mean age was 45.46 ± 11 years ($p = 0.97$), 52.94% were females ($p = 1.00$). The most frequent baseline nephropathy was HIV associated nephropathy (47.06%) in the HIV group and chronic glomerulonephritis (33.33%) in patients without HIV. Tuberculosis was the most common opportunistic infection found among HIV patients. After one year on haemodialysis, mortality in the HIV group was 37.25% and 21.57% in patients without HIV but the difference was not statistically significant ($p = 0.12$). The main causes of death were sepsis (46.66%), tuberculosis (10%) and haemorrhagic stroke (3.33%). Median survival on dialysis was 39 days (6-291) in patients without HIV and 184 days (2-360) in the HIV group ($p = 0.12$). Factors associated with death were age ≤ 30 years ($p = 0.01$) and infections of dialysis catheter ($p < 0.01$). **Conclusion:** This study showed that survival of patients with and without HIV on maintenance haemodialysis in Cameroon was similar after one year.

Timing and determinant of delay permanent vascular access creation for haemodialysis in Douala

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Introduction: Chronic haemodialysis requires a permanent vascular access that must be created four to six months prior to dialysis initiation. In Cameroon, late referral is a serious problem and the rate of emergency dialysis on temporary catheter is high. **Objective:** To determine the timing and determinants of the creation of arterio venous fistula (AVF) for haemodialysis in a tertiary reference hospital in Cameroon. **Methods:** A prospective longitudinal study at the Douala General Hospital, from January 2014 to April 2016 (16 months). For each participant, following data were collected: sociodemographics, comorbidities, pre-dialysis follow up, modality of dialysis initiation (emergency or planned start, hospitalization, vascular access type). Patients who started dialysis on a temporary catheter were followed until the creation of the AVF permanent vascular access. AVF creation was timely if done at least one month prior haemodialysis start; the delay was moderate if the creation of AVF was done within the month prior to dialysis initiation, and late if after. Logistic regression was used to look for associated factors. **Results:** One hundred and seven patients were included, 63.6 % being male, with a mean age of 48±17 years. Twenty eight per cent had a fistula created before dialysis start, 79.4 % started in emergency and hospitalization rate was 36.45%. At dialysis initiation temporary catheter was the most common first vascular access (78.5 %), followed by AVF (19.6 %), and cuffed tunneled catheter (1.9 %). Twenty six patients had a timely created AVF; and for 58 patients the AVF was created late, after a median time of 31 days (2 - 250) post dialysis initiation, the delay was moderated in 3.74 % and was assessed 10 days (3 - 22) prior dialysis initiation. Reasons for delay creation of AVF was lack of funds (45.24 %), report by the surgeon (26.41%), and the patient poor clinical condition (11.32 %). Factors associated to late creation were age >36 years, unemployment, hypertension, and hospitalization at dialysis initiation. **Conclusion:** Timing of AVF creation is below recommendations, and this is related to financial reasons, and the limited access to vascular surgeons.

Health-related quality of life in haemodialysis and its associated factors: an observational study about 64 haemodialysed patients in Senegal.

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Introduction: Haemodialysis patients face quality of life alterations.

Objectives: Assess the Health Related Quality of Life (HRQoL) of haemodialysed patients in 3 semi-urban hospitals in Senegal. Determine the sociodemographic and clinical factors associated with their HRQoL. **Methods:** From an analytical, transversal and descriptive observational study run for over 2 months from 1 March to 30 April 2016, the files of the patients with regular haemodialysis for at least 3 months and at least 18 years old were analysed. HRQoL was assessed by interviewing patients using the KDQOL SF 1.3 questionnaire. The levels of association between the values of the health domains and the sociodemographic, clinical and paraclinical criteria were analysed using non-parametric tests from Wilcoxon or Kruskal-Wallis. A difference was considered statistically significant from a threshold of $p < 0.05$. **Results:** 64 patients participated in the study. Mean age was 43.3 ± 19.9 years. Hypertensive nephropathy was the most frequent nephropathy (39.1%). Mean average duration of haemodialysis was 25.2 ± 18.9 months. The lowest mean average scores were in the "Work status" (28.9) and "Burden of kidney disease" (33.9) areas. The highest mean average scores were in the "Dialysis staff encouragement" (88.6) and "Quality of social interaction" (86.7) areas. Women had a significantly better score (93.8) than men (83.3) in relation to the "Dialysis staff encouragement" area ($p = 0.02$). Married patients had, compared to unmarried patients, significantly lesser scores about the "Sexual function" (55.8 vs 96.1; $p = 0.006$) and "Patient satisfaction" areas (74.8 vs 87.2; $p = 0.01$). Patients who had residual diuresis ≤ 500 ml/d had significantly lower scores than the others, in the "Symptoms/problems" (73.3 vs 81.5; $p = 0.03$), "Overall health" (60.7 vs 73.3; $p = 0.02$) and "Patient satisfaction" (74.0 vs 84.1; $p = 0.02$) areas. **Conclusion:** Information and a tailor-made psychological follow-up are important in improving the quality of life of the haemodialysed in Senegal, particularly regarding the men, the patients who are highly educated, and those with a significant reduction in residual diuresis.

Non adherence to haemodialysis regimens amongst patients in two centres in Cameroon.

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Objectives: To determine the prevalence and predictors of nonadherence to the different haemodialysis regimens among patients on maintenance haemodialysis in two public centres in Cameroon. **Materials and Methods:** We conducted a cross-sectional and analytic study in the Buea Regional and Douala General Hospital haemodialysis centres from the 1st of January to the 29th of February 2016. Consenting patients on dialysis for ≥ 3 months were included. Nonadherence to fluid restriction was defined as a mean interdialytic weight gain in the past month $>5.7\%$ of the dry weight, nonadherence to dietary restriction as a predialysis serum phosphorus $> 5.5\text{mg/dl}$ in a patient on phosphate binders in a well-nourished patient, and nonadherence to haemodialysis sessions as skipping at least one haemodialysis session in the past month. The study was approved by the institutional ethics board. **Results:** A total of 170 (112 males) participants with a median age of 49 years (range 14-79) were included. The median dialysis vintage was 35 months (range 3-180 months). The prevalence of nonadherence was 15.3% to fluid restriction, 26.9% to dietary restriction and 21.2% to dialysis sessions. Age ≤ 49 years ($p\text{-value}=0.006$, OR: 5.07, 95% CI: 1.59-16.20) and unmarried status ($p\text{-value}=0.041$, OR: 2.63, 95% CI: 1.04-6.66) were independently associated with nonadherence to fluid restriction. No factor was associated nonadherence to dietary restriction and haemodialysis sessions. **Conclusion:** Nonadherence to haemodialysis regimens is common amongst patients on maintenance haemodialysis. Younger age and being unmarried were the predictors of nonadherence to fluid restriction.

Intradialytic hypertension and associated factors among chronic haemodialysed patients at the Douala general hospital

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Objective: To determine the incidence and associated factors of intradialytic hypertension (IDHTN) among patients on chronic haemodialysis in Cameroon. **Method:** We conducted a prospective cohort study in the haemodialysis center of the Douala General Hospital including 176 patients who were followed during their dialysis sessions. For each patient blood pressure was measured with a validated automatic manometer at the beginning and at the end of the dialysis session. IDHTN was defined as any increase in systolic blood pressure ≥ 10 mmHg between the first and the last measurement. Also each patient had an electrocardiogram done for the search of left ventricular hypertrophy and 10 ml of blood was taken for albumin dosage. The incidence was expressed as the number of treatments in which IDHTN occurred per 100 of all haemodialysis treatments. We used logistic regression for associated factors and $p < 0.05$ was statistically significant. **Results:** The mean age of our participants was 49.06 ± 13.97 years with 64.2% male. We followed 1981 dialysis sessions and the incidence of IDHTN was 48.36%, with a median of 5 episodes per patient (0 - 12) and women more affected ($p=0.01$). Factors that increase the risk were hypertension ($p < 0.001$), interdialytic interval ≥ 4 days ($p=0.007$), heart rate $\geq 75/\text{min}$ ($p=0.012$), the consumption of antihypertensive drug on dialysis day ($p < 0.001$) and blood transfusion during dialysis session ($p < 0.001$). Factors lowering the risk were age ≥ 50 years ($p=0.006$), monthly income ≥ 35000 FCFA ($p=0.002$), duration on dialysis ≥ 30 months ($p < 0.001$), dry weight ≥ 67 kg ($p=0.001$), ultrafiltration rate ≥ 800 mL/h ($p < 0.001$) and a blood pressure $\geq 140/90$ mmHg at the beginning of the session ($p < 0.001$). **Conclusion:** Intradialytic hypertension is a frequent phenomenon observed amongst patients on haemodialysis in Douala and associated factors are various, related to patients and to dialysis procedure.

Incidence of hepatitis B and C infections among patients on maintenance haemodialysis at the Yaounde General Hospital

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Objective: To determine the incidence rates of HBV and HCV infection among patients on maintenance haemodialysis. **Methods:** We conducted a 38 months' historical cohort study in the haemodialysis Unit of the YGH. The cohorts consisted of patients who tested negative for hepatitis C (anti-HCV) antibodies in December 2012 on the one hand, and those who were negative for hepatitis B surface antigen (HBsAg) in January 2013 who were alive on HD in the center in March 2016. Serological testing for HBsAg and anti-HCV antibodies in March 2016 was identical to that at inclusion using a 3rd generation ELISA (Monolisa HBs Ag ULTRA and Monolisa Anti-HCV PLUS Version 2, Biorad) at the virology laboratory of Centre Pasteur du Cameroun, Yaounde. The hospital ethics committee approved the study. **Results:** The HBsAg cohort consisted of 38(26 males) patients with a mean age at inclusion of 47.7 ± 15.3 years, and a follow up period of 38 months, while the HCV cohort consisted of 33(21 males) patients with a mean age at inclusion of 41.5 ± 12.7 years and a follow-up of 39 months. About 71 % (n=27) of the HBsAg cohort had protective anti-HBsAg antibody levels at inclusion; and two participants were vaccinated during follow-up. About 44 % (n=17) in the HBsAg and 60 % (n=20) in the Anti-HCV cohorts received blood transfusion during the follow-up period. The incidence rate of HBV infection was 0 per 100 patient years; while that for HCV infection was 7.6 cases per 100 patient years. None of the factors evaluated were associated with HCV infection. **Conclusion:** The high incidence of HCV infection in this facility may be due to the non-respect of universal precautions for prevention of infection. The absence of seroconversion in the HBV cohort is probably due to the high frequency of protective antibodies against hepatitis B. **Key Words:** haemodialysis, hepatitis B, hepatitis C, incidence rate, risk factors

Foot ulcers in patients undergoing haemodialysis in Cameroon

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Objectives: The objectives of this study were to assess the risk of foot ulceration, determine the prevalence of foot ulcers and identify factors associated with the occurrence of foot ulcers in patients undergoing haemodialysis in Cameroon. **Methods:** This was a cross-sectional study including all patients suffering from stage 5 chronic kidney disease, undergoing haemodialysis and having given informed consent. Sampling was consecutive and non-exhaustive. Data were collected using a questionnaire, and foot examination was performed on all participants. Factors associated to foot ulcers were identified using the multivariate binary logistic regression. **Results:** A total of 308 patients were included of which 210 (68.2%) men and 56 (18.2%) were diabetic. The average age was 47.62 ± 14.20 years and the median duration haemodialysis 31.5 [11.2 to 59.2] months. The main risk factors for foot ulcers were: poor foot hygiene 297 (96.4%), inappropriate footwear 168 (54.5%), skin diseases 149 (48.4%). Overall 132 (42.9%) patients presented a high risk of foot ulceration. The global prevalence of foot ulcers was 3.9% and was greater among diabetics 17.9% (n=10) than in non-diabetics 0.8% (n=2) p-value <0.0001. All these ulcers were classified grade 1 according to Wagner. Factors associated with foot ulcers were: history of foot ulcers (OR = 47.03; 95% CI: 3.62 to 611.52, P: = 0.003) and peripheral arterial disease (OR: = 7.72; 95% CI: 1.15 to 51.94; p: = 0.036). **Conclusion:** Foot ulcer risk factors are prevalent in haemodialysis. However, the prevalence of foot ulcer is relatively low and the factors associated to its onset are not specific to dialysis.

Aseptic osteonecrosis of the lunatum (Kienbock's disease) in the haemodialysis: a case report

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Objective: to report a case of aseptic osteonecrosis of the lunatum (Kienbock's disease) in the haemodialysis.

Case report: Patient aged 42 years, right-handed, without profession, followed for Lupus since 1995 with 5mg / day corticosteroid therapy, chronic terminal renal failure on lupus nephropathy since 2000, periodic haemodialysis at 3 sessions per week on right FAV. Following a closed trauma of the left wrist (22/04/13), the patient presented pain with limitation of the articular mobility. An X-ray of the left wrist (F + P), made on 23/04/2013, had An osteonecrosis of the semi-lunar (Kienbock disease), for which a scannographic complement was requested for lesional and pretherapeutic assessment, obese an aspect of osteonecrosis of the lunatum in connection with kienbock disease, with osteoarthritis (Stage IV Of the Lichtman classification) and the patient benefited from a modeling arthroplasty. The evolution was good with resumption of a normal mobility of the wrist and with disappearance of the pain. **Discussion:** Kienböck's disease was described by Kienböck in 1910. It is an avascular necrosis of the semi-lunar. Epidemiology is poorly known and is still discussed. The physiopathological mechanisms evoked are essentially hyperpressure, repeated microtrauma leading to semilunar hypovascularization, corticosteroid therapy and autoimmune diseases were also described as a possible cause of secondary kienbock disease. The choice of functional or surgical treatment depends on several factors, including the age of the patient, his profession, the affected side, the stage Of the disease, the existence of osteoarthritis of the wrist. **Conclusion:** Rare pathology, multifactorial pathogenesis, difficult diagnosis and treatments.

Assessment of lipid dysfunction of patients under haemodialysis in Cameroon

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Objective: To assess the lipid dysfunction among patients maintain under haemodialysis in two référencecenters of haemodialysis in Cameroon. **Methods:** A descriptive comparative study was carried out in Nephrology Unit of the University Teaching Hospital of Yaounde and the same Unit of the Douala General Hospital, Cameroon. A total of 160 subjects were included including 80 patients under haemodialysis and 80 healthy controls. Body mass index (BMI) was measured according to WHO guidelines. Serum total cholesterol, triglycerides and high-density lipoprotein cholesterol (HDL-C) were assayed before and after haemodialysis session. Low-density lipoprotein cholesterol (LDL-C) was calculated by Friedwald equation. **Results:** Patients under haemodialysis had significantly lower BMI as compared with the controls (p0.05). **Conclusion:** Patients under haemodialysis have significantly low BMI, total Cholesterol, LDL-C and HDL-C depicting malnutrition leading to inflammation, accelerated atherosclerosis process and cardiovascular complications. **Key words:** Total cholesterol, Lipoproteins, BMI, Haemodialysis, Cardiovascular disease.

D-dimer levels in maintenance haemodialysis patients

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Objective: We aimed to estimate the prevalence of elevated D-dimer levels in all chronic haemodialysis patients, and to identify factors associated with increased D-dimer. **Methods:** In 46 chronic haemodialysis patients from our center, D-dimer was measured before dialysis and before administration of anticoagulant drugs, using turbidimetry process. The cut-off of $>0,5\mu\text{g/ml}$ was used as "positive" value. A regular C-reactive protein (CRP) was measured, and a value of $0,5\mu\text{g/ml}$ in 75% of cases. D-dimer was positive in 86,6 % of patients in subgroup (1), 75% of those in subgroup (2), but was still positive in 75 % of patients in subgroup (3) – median D-dimer was 0,76 (IQR 0,52-1) $\mu\text{g/ml}$. D-dimer was correlated to patients' age, but not dialysis vintage. In univariate analysis, the D-dimer levels were significantly higher in patients with chronic diseases and increased CRP. Multivariate logistic regression showed that only age and positive CRP were independently associated with positive D dimer. **Conclusion:** the high prevalence of positive D-dimer values even in haemodialysis patients without additional disease limits the use of D-dimer for exclusion of thromboembolic diseases in haemodialysis patients. Perhaps a higher cut-off value should be used in this population, but this hypothesis needs testing in a large prospective study.

Patients' Perspectives on Haemodialysis Vascular Access

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Introduction: Vascular access function is an important determinant of patient mortality, morbidity, and quality of life. As such, it is referred to as the "Achilles' Heel" of haemodialysis. This study aims to describe patient perspectives on vascular access. **Methods:** We conducted interviews with 40 adults patients receiving haemodialysis with an arteriovenous fistula at the haemodialysis center of the university hospital Ibn Sina. Five major themes were identified: developing mental fortitude for access (accepting necessity for survival, self-advocacy, experiential competency, dependency on others, gaining vascular knowledge), device intrusiveness on the body (restricting normal function, bodily invasion, confronting appearance), inhibiting pain (aversion to surgery, persisting needle anxieties), exposure to dire health consequences (resigning to inevitable failure, anticipating serious complications, wary of medical incompetence), and imposing burdens (generating additional expenses, encumbering family members). **Results:** The age of participants ranged from 21 to 68 years, gender was equally represented. The median dialysis vintage was 14 years. Participants felt that the fistula had become a part of their body and in turn became conscious of their own vasculature. They gained an increased level of awareness about their own veins, which enabled them to become more efficient with cannulation. In return, they ignored many potential complications. The pain of cannulation caused many participants to be fearful of inserting a needle in their arm, even if it is done by experienced nurses. They felt more comfortable when treated by experienced staff or those who were familiar with their access site. All Patients were proactive in protecting their vascular access from damage or complications. **Conclusion:** Vascular access is more than a surgical intervention. Timely education and counseling about fistula and building patients' trust in health care providers may improve the quality of dialysis and lead to better outcomes for patients with chronic kidney disease requiring haemodialysis.

Exhaustion of vascular access of haemodialysis: last chance

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Objectives: To describe the clinical-demographic profile of patients switching from haemodialysis (HD) to PD, due to exhaustion of the HD vascular access. **Methods:** Review of the medical records of all patients in the PD program of the Hospital IbnSina in Rabat city, Morocco. **Results:** The study included 5 patients (median age: 55 years). All of them were women. Here primary disease for end stage kidney disease (ESRD) was undetermined. In median of 10 years of HD, all patients benefited from many attempts of arteriovenous fistula (AVF) on both upper limbs. There had repeated DLC insertion at different sites. Upper and lower limb vessels Ultrasound showed numerous large trunk thrombosis, also demonstrated by multi-detector computed tomography venography. One patient had an inferior vena cava catheter but it was complicated by dysfunction. All patients were switched to PD programme on emergency basis with good outcome to date. **Conclusions:** Initiating RRT on an emergency basis through HD and using DLC may lead to a fast exhaustion of vascular access, leaving PD as the only viable option.

Nasal carriage of *Staphylococcus aureus* in peritoneal dialysis and staphylococcus peritonitis

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Objectives: To assess the prevalence of SA (NASP) nasal carriage in peritoneal dialysis patients, describe its antibiotic susceptibility profile, and specify the impact of the NASP on the peritonitis occurrence in peritoneal dialysis patients for whom the eradication of nasal (SA) has been completed. **Patients and methods:** This is a retrospective study covering the period from 2007 to 2016. Nasal swabs were made three months apart. According to the NASP, chronic and intermittent carriage is identified and the patient has been treated with fusidic acid, applied topically once a day, three successive days, for three months. **Results:** Our series include 52 patients set DP (APD and CAPD). The mean age was 52 +/- 14.38 years, with a sex ratio of 0.63. NASP prevalence was 50% (26 patients). Chronic carriage was found in 7 patients (28%), the intermittent carriage in 18 patients (72%). SA strains were sensitive to methicillin in 96% of cases. 18 patients (34%) had a SA exit-site infection. 17 patients had peritonitis including 5 with SA. The rate of peritonitis SA was significantly higher in carriers of SA (OR 0 4.72; p <0.033). **Discussion:** *Staphylococcus* nasal carriage is a risk factor for *Staphylococcus Aureus* peritonitis in peritoneal dialysis patients. Its eradication reduces the risk of emergence site infection; however it does not reduce the risk of peritonitis. **Conclusion:** The Eradication Protocol is not codified; studies with a larger number of patients are needed to draw conclusions.

Role of the nurse in the preservation of the venous capital for patients receiving haemodialysis

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Objective: To determine the role of nurse in the protection of the venous capital in patients receiving haemodialysis. **Methods:** We conducted a cross-sectional study in March 2016 at IBN SINA university center of Rabat, interesting nurses who often have contact with PRH. Results: 40 nurses participated in this study; The mean age was 40 +/- 18 years and a sex ratio of 0.6. The average length of care was 18.5 +/- 16.6 years. 58% of these nurses were informed about the importance of preservation of the venous capital for PRH. The left arm was punctured more than the right one in 55.6% of cases. The back of the hand was the most punctured site in both sides (62.5%) compared to the elbow crease (15 %) and wrist (12.5%). To dilate veins, nurses used more the tourniquet in 57.4%, followed by alcohol passage (31.4%) and heating (11.2%). Nurses used more the syringe (25%) and VENOJECT 18 gauge (25%) to puncture the veins, followed by VENOJECT 21 gauge (20.3%), the intranule 18 gauge (17.1%) and intranule 20 gauge (12.6%). The most encountered complications for nurses were essentially hematomas (49%), followed by bruising (27%), lymphangitis (22%) and pruritus (2%). **Conclusion:** Inform nurses about the value of preserving the venous capital for PRH, seems to be interesting and important, to overcome the complications that will damage this venous system.

Carpal tunnel syndrome for patients receiving haemodialysis

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Objective: To determine the risk factors of CTS for PRH. **Methods:** Retrospective and descriptive study from January 2000 to December 2015, including 30 haemodialysis patients at dialysis center of the university hospital IBN SINA of Rabat. **Results:** We collected 19 cases of CTS in 10 patients, giving a prevalence of 33%. The achievement was the right side in 5 cases, the left side in 6 cases and bilateral in 4 cases. We noted a female predominance (70%). The mean age was 52 +/- 13 years, with an average duration on dialysis before the onset of CTS 19.5 +/- 8.5 years. Functional signs were mostly nocturnal paresthesia and pain of the affected limb during the dialysis session. We noted 10 cases (52.7%) of CTS in the side of fistula. Beta 2 microglobulin was practically raised in all patients with a mean of 49 +/- 24 mg / l. The treatment was conservative in one case, and surgical in the others cases. The prevalence of CTS in PRH is 9 to 32%, it increases with duration of dialysis (starting in Grade 5). The risk factors are: the current age, duration of dialysis, female sex, and high levels of Beta 2 microglobulin.

Sleep disorders in maintenance haemodialysis patients

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Objective: We aimed in our work to study the sleep disorders among the patients undergoing chronic haemodialysis in the nephrology department of IbnSina university hospital of Rabat. Methods: 34 patients undergoing chronic haemodialysis (19F/16M) aged from 35 to 65 years were surveyed using the « réseaumorphée » questionnaire. Results: Sleep disorders were reported by 69% of our patients, with a feminine predominance (54%) and an average age of 47 years. Insomnia has been reported in all the cases. Of the insomnia types: difficulties falling asleep have been reported by 71% of the patients, middle-of-the-night insomnia by 62% and early morning awakening by 62%. The other sleep disorders reported were excessive daytime sleepiness (46%), a disturbed sleeping cycle (61%) and restless legs syndrome (21%). Organic symptoms have been reported such as insomniac pain (77%), excessive movement while sleeping (44%), nightmares (31%), morning headaches (23%), snoring (15%) and gastroesophageal reflux (15%). These alterations have been described by 46 % of our patients as having a negative effect on life quality and functional status. 17% of the patients reported undergoing a depressive episode, that required medication in half the cases. Conclusion: Sleep disorders, and insomnia in particular are frequent in maintenance haemodialysis and have an obvious negative influence on life quality. Therefore, it is essential to diagnose and correct them in collaboration with psychiatrists and sleep specialists.

Factors associated with periodontitis in patients with end stage renal disease on maintenance haemodialysis

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Objectives: The aim of the study was to determine the prevalence and associated factors of periodontitis in patients on maintenance HD patients in Cameroon. Methods: This was a cross sectional study of four months' duration (December-March 2016) at 4 HD centers. Consenting patients on HD for CKD were consecutively enrolled. Patients with acute inflammatory illnesses, complete edentulism and malignancies were excluded. Relevant sociodemographic and clinical data was obtained from patients and medical records. A subjective global assessment (SGA) questionnaire was then administered to evaluate nutritional status. Patients were examined for presence of bleeding on probing, plaque, pocket depths and clinical attachment losses and DMFT (Decay, Missing, Filled Teeth) index. Predialysis blood samples were collected for serum albumin and C - reactive protein assay. Logistic regression modelling was used to identify factors associated with periodontitis. Results: We included 300 participants with a predominance of males 69.3%. From the 300 participants, we had 327(54.69%) decayed teeth, 157(26.25) missing and 114(17.39%) of filled teeth in this study. Their mean age was 48.80±13.84 (range: 15-79) years. The median HD duration was 23(9-51). The prevalence of malnutrition was 19.7%; mean serum albumin was 33.37±6.69g/l, and 24.3% of participants had CRP >6mg/l. The prevalence of periodontitis was 32.9% with 4% graded as severe. Age ≥45 (P=0.001), male gender(P=0.002), diabetes(P=0.02), CRP≥6(P=0.006), malnutrition(P=0.001), BMI<24kg/m²(p=0.016) and smoking (p=0.034) were predictors of periodontitis. Conclusion: The prevalence of periodontitis is high and is associated with malnutrition and inflammation, which could contribute to cardiovascular morbidity in the HD population. Our findings suggest a need for the inclusion of routine dental care in the management of this patient group. **Key words:** Periodontitis, haemodialysis, factors associated, malnutrition, inflammation.

Infections of hemodialysis catheters

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Objective: Our goal is to describe the clinical, paraclinical and bacteriological aspects of infections of hemodialysis catheters in our series. **Patients and methods:** We carried out a retrospective study over a period of one year, involving 18 hemodialysis patients hospitalized in the infectious diseases department of the CHU Ibn Rochd of Casablanca. **Results:** The majority of our patients were males (72%) with an average age of 59 years. Clinically, fever was the main symptom found in all our patients, associated with signs of sepsis in 83% of cases, while 11% of the patients showed signs of septic shock, the time of onset of clinical signs was Of 29 days. All patients had a biological infectious syndrome with leukocytosis and positive CRP. All our patients benefited from peripheral blood cultures and on catheters with culture of the distal end of the catheter, allowing the determination of the causative germ in 66.5% of the cases. The most frequently isolated organisms were Staphylococcus Aureus (44.5%), Staphylococcus Coagulase Negative (11%), Escherichia Coli (5.5%) and Candida sp (5.5%). All our patients received a probabilistic antibiotic therapy based on Vancomycin and Amikacine adapted to the renal function and the data of the antibiogramme thereafter. The progression was favorable in 84% of the patients. **Conclusion:** Vascular access in hemodialysis deserves special attention. The prevention of infectious complications in this category is based on compliance with hygiene rules and the temporary use of catheters and thus the creation of native arteriovenous fistula.

Sleep quality in hemodialysis patient in general hospital of douala- cameroon

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objectives: the aim of this study was to assess sleep quality and its predictors in patient undergoing maintenance hemodialysis. **methods:** we conducted a cross sectional study of 2 weeks in the douala general hospital of cameroon. quality of sleep was assessed by the pittsburgh sleep quality index (psqi) with 19 auto-evaluating questions and 5 roommate questions. we defined poor sleep quality was as a global score > 5; short sleep duration as sleep 1hour to fall asleep and low sleep efficiency as ratio hours slept/hours spent in bed <0.65. questionnaire was self-administrated at home. serum calcium and hemoglobin levels were obtained from medical records by calculating the mean values within the past 3 months. **results:** a total of 46 participants (25 females) responded to the questionnaires. of these, 10 had a history of diabetes. their mean age was 44.01±4.8 years and median dialysis duration was 2 years. mean values of laboratory data were hemoglobin= 8.07±1.96 g/dl (37% anemia), and serum calcium=90.9 ±10 mg/l. thirty-five (76.1%) participants reported poor sleep quality with 5 (15.3%) of them using sleep medication. the most frequent abnormal sleep components were subjective sleep quality, (87%). sleep disturbances (85%) and sleep latency (76%). short sleep duration was common (40%) with thirteen subjects (28%) reporting less than 5 hours of sleep per night. long sleep latency and low sleep efficiency were both found in 30.5%. loud snoring or long breath pauses during sleep were reported by roommates in 18 (39%) participants. there was a linear correlation between hb level and sleep quality ($r=-0.534$ $p=0.001$). **conclusion:** poor sleep quality is frequent in hemodialysis patients in douala and may be driven in part by anemia. further studies are required to evaluate the full picture of this disorder in the cameroonian hemodialysis population. **key words:** sleep quality- hemodialysis- cameroon- anemia.

Depression and anxiety in hemodialysis patient in general hospital of douala

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objective: this study was designed to determine the prevalence of anxiety and depression in a group of patients on maintenance hemodialysis in a tertiary hospital in cameroon. **method:** we conducted a cross sectional study of 2 weeks' duration in the douala general hospital of cameroon. we included consenting patients who had been on maintenance hemodialysis for at least 6months. patients with acute undercurrent illnesses were excluded. depression and anxiety was evaluated using hospital anxiety and depression scale (hads). anxiety was defined as total anxiety score > 10; depression as total depression score ≥ 11 and short sleep duration as sleep < 6 hours per night. the questionnaire was self-administrated by the patient at home. serum calcium and hemoglobin levels were obtained from medical records by calculating the mean values within the past 3 months.

results: a total of 46 participants (21males) including 2 on anti-depressive medications responded to the questionnaire. their mean age was 44.07 ± 14.89 and the median dialysis vintage was 2 years [0.5-9]. ten participants had a history of diabetes and 5 (11%) had hiv infection. the mean hemoglobin was 8.07 ± 1.96 g/dl. five participants were using sleeping pills. the median score was 7.69 ± 3.55 [2-16] for anxiety and 6.1 ± 3.52 [1-16] for depression. in all, 12 (26%) participants had anxiety while 5 (11%) had depression. two participants had both anxiety and depression. anxiety was correlated with short sleep duration ($r=0.403$, $p=0.006$) while depression was correlated with use of sleeping pills ($r=0.326$ $p=0.029$). age, sex, dialysis vintage, hemoglobin, diabetes and hiv were not associated to depression or anxiety. **conclusion:** anxiety is frequent in this patient population and associated with sleep disturbances. screening and appropriate management of these conditions may improve the quality of life of these patients. key word: depression- anxiety- hemodialysis- cameroon.

Epidemiological profile of diabetic hemodialysis patients: experience of 10 years

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Objective: To describe the importance and outcome of diabetic patients who started hemodialysis in the Sousse region over a period of 10 years. **Methods:** This is a retrospective study of 10 years (November 2006-December 2015) including all patients in end stage renal disease who started hemodialysis (HD) in our dialysis unit CHU Sahloul. **Results:** The total number of patients who started HD in our unit was 877 patients including 260 diabetic patients. The mean age of diabetic patients was 58.40 ± 13.37 years. Most diabetic patients (40.1%) were aged between 50 and 70 years, followed by those aged more than 70 years (36%) at the start of hemodialysis. Our diabetic population was predominantly male (67.7 versus 32.3%) with a sex ratio of 2. Diabetic nephropathy represented more than half (67, 7%) of the total of glomerular nephropathies and 30% of the etiologies of the terminal CKD respectively all causes put together. Approximately 1/3 (28.7%) of patients on hemodialysis each single year was diabetic with a progressive increase in this incidence reaching 42.2% for the year 2015. The mean survival of our patients was 54.91 ± 4.69 months. Patients with diabetes had the poorest survival compared to non-diabetics ($p = 0.001$). **Conclusion:** Our results are in line with those of the various series confirming that diabetic nephropathy remains the primary cause of terminal CKD despite improved management of diabetic patients and prevention and screening strategies. The age of diabetic patients requiring hemodialysis was advanced > 50 years with a tendency to dialyse more and more patients at a more advanced age > 70 years which can be explained by the improvement of the quality of care of patients with diabetes alongside with more efficient nephroprotective treatment. Our study also confirmed the detrimental impact of diabetes on patient survival even in the case of hemodialysis patients explained by inflammatory phenomena and atherosclerosis in the context of MIA syndrome in diabetics and aggravated by hemodialysis. Given the poor survival of diabetic hemodialysis patients compared with those without diabetes, an intensified management of diabetic patients before and after the installation of diabetic nephropathy is necessary.

Measurement of the ankle brachial index in chronic hemodialysis in Kinshasa

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Objective: The pulsed wave velocity, measured by the ankle-Brachial index (ABI), is a diagnostic marker of atherosclerotic peripheral vascular disease which is known to be associated with increased mortality. However, few studies have evaluated this parameter and its risk factors in the hemodialysis population. **Methods:** 60 hemodialysis patients were followed in 3 centers of Kinshasa for more than 6 months with 35% diabetics and 30% hypertensive patients. The vascular abnormalities were sought with the measurement of the ankle arm index using a mini doppler brand Bidop Hadeco and an armband. Different characteristics between two groups (ICB <0.9 and ICB ≥ 0.9) were tested using the chi square test for categoriels, the student t for the normally distributed continuous variables and the nonparametric test of Mann Withney for asymmetric continuous variables. Statistical significance was defined as $p < 0.05$. **Results:** The mean age of patients was 52 ± 15.9 years with 43 men and 17 women. The duration in HD was 15.1 ± 3.7 months. The AAI60 years ($p=0.003$), diabetes mellitus ($p=0.001$), long duration in hemodialysis ($p=0.032$), diastolic blood pressure ($p=0.008$) and pulsed pressure ($p=0.001$). **conclusion:** These results show that the frequency of peripheral arteriopathic disease is high and should be systematically sought in hemodialysis especially in the presence of these factors (advanced age, diabetes mellitus, long duration in hemodialysis, diastolic blood pressure and pulsed pressure.)

Blood pressure control in a group of haemodialysis patients at Yaounde General Hospital

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Objectives: The main objective of this study was to evaluate the adequacy of predialysis and postdialysis blood pressure control, in a group of patients undergoing chronic hemodialysis. **Methods:** Adult patients undergoing dialysis for more than sixth months were included during the study (from the 2nd to the 20th January 2017). Their blood pressures of the last month were reviewed. Dialysis reports were consulted, and those with missing data were excluded. We also excluded unstable patients. The target for pre-dialysis blood pressures was set at $< 140/90$ mmHg and for post-dialysis blood pressures set at $< 130/80$ mmHg. We considered adequate blood pressure control for pre or postdialysis blood pressures when the patient achieved the target on four consecutive dialysis sessions. Approval of hospital ethics board was obtained. **Results:** A total of 96 patients were recruited, of which 69 men and 27 women. The sex ratio was 2/1. The average age was $48,5 \pm 29$ years, and the mean duration in hemodialysis was $52,9 [7-168]$ months. Concerning patients characteristics: 32(33, 3%) were not taking any antihypertensive medications; 46 (47%) had an interdialytic weight gain under 5%. Adequate predialysis blood pressure control was obtained in 26 (27%) patients, whereas adequate postdialysis blood pressure control was obtained in 12 (12%) patients. **Conclusion:** Blood pressure control was low in this population undergoing two weekly dialysis session. **Key words:** blood pressure control, predialysis, postdialysis, yaounde

Prevalence of acquired cystic kidney disease in black africans on chronic dialysis in senegal

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Objectives: The objectives of the study were to determine the prevalence of acquired cystic kidney disease (ACKD) in chronic hemodialysis patients and to precise its epidemiologic, clinical and echographic characteristics and find risk factors. **Methods:** It is a retrospective, descriptive, multicenter analytical study conducted from 1 March 2013 to 30 November 2013. We included regularly dialyzed patients (both hemodialysis and peritoneal dialysis) for at least 3 months. Diagnosis was made by medical imaging with the presence of at least 3 to 5 identified cysts. **Results:** One hundred and fourteen patients were enrolled, among them 98 were from hemodialysis and 16 from peritoneal dialysis. The prevalence of ACKD was 37.7% (n=43). In hemodialysis the prevalence was 39.8% (n=39) and 25% (n=4) in peritoneal dialysis. The mean age of patients was 50,9 years. The sex ratio was 1,52. The mean duration in dialysis was $63.41 \pm 39,37$ mois (12-158 months). The most common symptoms were spontaneous back pain with 39.5% (n=17). The mean hemoglobin level was $9.11 \pm 2,17$ g/dl. In patients with ACKD, benign hypertensive nephrosclerosis represented 58.2% (n=25) of etiologies. The average size of kidneys (length x width x thickness) was $78 \times 41 \times 34$ mm and $79 \times 40 \times 31$ mm for the left and right kidney respectively. The average size of cysts was $19.51 \pm 12,76$ mm. 10 patients presented intracystic septa, 2 patients had cyst wall calcifications and one patient had echoic content of the cyst. The risk factors of the ACKD were male gender (p=0.009) and duration in dialysis exceeding 5 years (p=0.001). The diabetic nephropathy was a protective factor against the disease. **Conclusion:** This study shows a relatively high prevalence of acquired cysts in hemodialysis patients in Senegal.

Polycystic kidney disease in peritoneal dialysis: Ibn Sina Hospital of Rabat experience

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Objective: The aim of our work is to describe the different clinical, epidemiological outcomes, complications and technique survivals in patients with PKD performing PD. **Material and method:** A retrospective study over a period of 10 years (2006-2016), with 11 patients in PD with PKR. **Results:** PD patients with PKR accounted for 8% of all patients. The average age of our patients was 63 years with age extremes of 52 and 84 years. The predominance was male with a sex ratio of 4.5. The mean duration of mean peritoneal dialysis is 45 months. All patients were initially in CAPD, two of whom switched to APD because of the decline of residual renal function. Nine patients (82%) had peritonitis with an incidence of one episode of peritonitis / 21.7 patient-months over a cumulative 456 patient-months. One patient had peritoneal fluid leakage three weeks after his PD catheter was placed. Abdominal wall hernia occurred in two patients (18%). No patients had superinfection of cysts, cerebral haemorrhage or colonic perforation. One patient was transplanted (9%), two patients underwent hemodialysis (18%) after 4 and 8 years of PD. Two patients died (18%) without a cause related to the technique. Currently, five patients (46%) are still in PD. **Conclusion:** PKR does not represent an additional risk factor in patients treated with PD on the incidence of hernias, leaks or infectious complications. PD is a therapeutic option for patients with PKR. The complications do not aggravate either the prognosis of the patients or that of the technique.

Primary Hyperoxaluria Type1: the bone marrow biopsy makes the diagnosis after 9 years of hemodialysis

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Objective: We report the case of a young patient of 16 years old, in chronic hemodialysis since the age of 7 secondary to nephrocalcinosis. His parents were second degree cousins. The patient was hospitalized for abdominal distension associated to a bone pain and deterioration of his general condition. Physical examination revealed hepatosplenomegaly with ascites and lymphadenopathy in femoral, cervical and axillary nodes. the scan shows a diffuse bone condensation. the blood test finds a pancytopenia . the anaemia was resistant to erythropoietin (EPO). Examination of bone marrow biopsy specimen showed that the marrow was extensively replaced with oxalate crystals and fibrous connective tissue with severe decrease of hematopoietic cells. The Genetic testing proved diagnosis by showing the recurrent mutation in Morocco: c.731T > C in exon 7 of AGXT gene in the homozygous . **Conclusion:** This case illustrates the harmful consequences associated with the delayed diagnosis of this rare disease. Treatment based on liver or liver and kidney transplant, which may supplement enzymatic activity and kidney function, respectively.

Prevalence and characteristics of intradialytic hypotension - a two-months, prospective study of 884 haemodialysis sessions

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Objective: The goal of this study was, to assess the prevalence of IDH, primarily in reference to the European Best Practice Guideline (EBPG) on haemodynamic instability: A decrease in systolic blood pressure (SBP) ≥ 20 mmHg or in mean arterial pressure (MAP) ≥ 10 mmHg associated with a clinical event and the need for nursing intervention. **Methods:** During 2 months we prospectively collected haemodynamic data, clinical events, and nursing interventions of 884 haemodialysis sessions from 45 prevalent patients who dialyzed with constant dialysate conductivity. Patients were considered as having frequent IDH if it occurred in >20 % of dialysis sessions. **Results:** Decreases in SBP ≥ 20 mmHg or MAP ≥ 10 mmHg occurred in 35.5 %, clinical symptoms occurred in 20 %, and nursing interventions were performed in 9.6 % of dialysis sessions. Dialysis hypotension according to the full EBPG definition occurred in only 15 % of dialysis sessions. Ten percent of patients had frequent IDH. Increased IDH frequency was associated with age, female gender, diabetes, longer end stage renal disease vintage, higher ultrafiltration volume, cardiovascular disease, lower pre-HD systolic blood pressure, Weight gain ,higher difference between prescribed and achieved post-HD weight. **Conclusions:** IDH frequency was highly variable, associated with individual facilities, patient and treatment characteristics.. Identifying practice patterns associated with IH coupled with routine reporting of IDH will facilitate medical management and may result in the prevention of IDH, decreased mortality, and decreased hospitalization.

Hemodialysis central catheter on double superior vena cava

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Objective: Here we report the case of a patient of 68 years, with Type 2 diabetes miltis for more than 15 years, at the stage of complications, arterial hypertension for more then 20-years, a Pacemaker was placed in for AV bloc on the left sub- clavicle vein. Two months after the instigation sessions of hemodialysis on right femoral KT for IRCT on diabetic nephropathy, the patient is sent to our Center for establishment of a new left jugular catheter. the installation of the left jugular with ultrasonography was simple, there was a normal progression of the guide wire, followed by installation of the hemodialysis catheter (Dualyse - Cath® 12F / Vygon), blood return was decent. An x-ray of the chest immediately after the intervention (fig1) did finds a central KT that runs along the left edge of the mediastinum, with an distal extremity behind the left cardiac silhouette. To explore any iatrogenic complication, we have undertaken the realization of angio-CT. The analysis of the CT-Scan has concluded to the persistence of the superior Left vena cava (PSLVC) , in the context of double superior vena cava, our catheter was in the left vena cava (fig 2). The PSLVC allows communication between the left innominate trunks, with the coronary sinus, which is dilated (fig 3). There is also no break-in of contrast that can evoke a vascular breach; It was then proceeded to the ablation of the jugular catheter and establishing a left femoral catheter in anticipation of the maturation of her humeral AV Fistula. **Discussion:**The PSLVC is a vascular anomaly found in 0.3% of the population and up to 10% of patients with congenital heart disease. This anomaly includes three variants (fig 4), in our case report we see a PSLVC of type II with dilatation of the left coronary sinus and pulmonary arterial hypertension. From our review, that chest x-ray aspect is typical and that vascular exploration

Impact of hemodialysis on ultrasound parameters of systolic and diastolic function of the Left Ventricle: comparative study before and after dialysis

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Introduction: Hemodialysis treatment in patients with renal impairment may affect cardiac function due to acute changes in blood volume, blood pressure, electrolytes, and vagal balance. The main of this study is to describe and analyze the impact of the hemodialysis session on ultrasound parameters of cardiac function.

Patients and methods: This is a prospective descriptive and analytical study. Carried out in the department of cardiology and in the department of Nephrology, hemodialysis and renal transplantation of the university hospital center of Marrakech. We included chronic hemodialysis patients at 3 sessions of 4 hours per week and with a hemodialysis time of more than 9 months. Patients received transthoracic echocardiography 2 hours before and 2 hours after the hemodialysis session. The difference is considered significant if $p < 0.05$.

Results: 40 patients were collected, 22 women and 18 men. Their mean age was 41.05 ± 18.8 years with an average hemodialysis time of 6.9 ± 6.17 years. The initial nephropathy was diabetic in 12, 5% of cases. The main cardiovascular risk factor was hypertension in 45% of cases. Hemodialysis induced a significant reduction in the LV end-diastolic volume ($p = 0.001$) of the LV telesystolic volume ($p = 0.004$), the LV diastastolic diameter ($p = 0.000$), the LV telesystolic diameter ($p = 0.002$) ($P = 0.0001$), the OA surface area ($p < 0.000$), the early diastolic velocity peak of the mitral flux E ($p = 0.002$). With tissue Doppler, early diastolic velocity Measured at the septal side of the mitral ring decreased significantly ($p = 0.01$). The Tei index of Left Ventricle and ejection fraction of the left ventricle showed no significant change after dialysis. **Conclusion:** conventional Doppler echocardiography is a no invasive method useful for cardiac morphological and functional study in renal insufficiency. This method coupled with tissue Doppler provides additional information on systolic and diastolic function of the left ventricle

Prevalence of left ventricular hypertrophy in chronic hemodialysis and factors Predictive of its occurrence

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Introduction: Cardiovascular complications are the leading cause of morbimortality in patients with chronic hemodialysis. This is frequent and multifactorial. The aim of our work is to assess the prevalence of LVH in our population and to determine its predictive factors. **Patients and methods:** This is a prospective multicenter analytical study carried out at the cardiology and nephrology-hemodialysis department of the University Hospital Center of Marrakech. We included chronic hemodialysis patients at 3 sessions of 4 hours per week and with a hemodialysis time of more than 9 months. Patients underwent transthoracic echocardiography. In order to determine the factors of occurrence of LVH, we compared demographic, clinical-biological and echocardiographic parameters between patients with or without LVH. **Results:** Our study included 40 patients. The mean age was 41.05 +/- 18.8 years. 55% of our patients were women. The duration of hemodialysis was 6.9 +/- 6.17 years. 5% of patients were smoking. The initial nephropathy was diabetic in 12.5% of cases, hypertensive in 12.5% of cases, Segmental and focal hyalinosis in 2.5% of cases, lithiasic nephropathy in 5% of cases and indeterminate in 60% of cases. 45% of the patients had dyslipidemia, 72.5% were anemic with an average hemoglobin of 10 +/- 1.7 g / dl before the hemodialysis session and 11.37 +/- 1.76 g / dl After the hemodialysis session. 70% of patients had secondary hyperparathyroidism with an average parathyroid hormone of 577 +/- 519 IU. 45% of our patients were hypertensive, mean systolic blood pressure was 110.1 +/- 18.9 mmhg, mean diastolic blood pressure was 71.7 +/- 14.5mmhg. The vascular approach was by arteriovenous fistulas in all patients. LVH was detected in 32.5% of cases. In patients with LVH, the thickness of the interventricular septum in diastole was an average of 12.92 +/- 2.66 mm. The thickness of the posterior wall in diastole was 12.07 +/- 2.2 mm. After a statistical analysis, the predictive factors for the occurrence of LVH were anemia (p = 0.03), hypertension (p = 0.33), hyperparathyroidism (p = 0.05), dyslipidemia (P = 0.007) and the age of hemodialysis greater than 10 years (p = 0.02). **Conclusion:** The prevalence of LVH is high in our study. The risk factors for LVH collected are anemia, high blood pressure, hyperparathyroidism, dyslipidemia and the age of hemodialysis. Regular monitoring in chronic hemodialysis focuses on the control of cardiovascular risk factors to prevent the occurrence of this complication

Lipid profile in chronic renal failure at the hemodialysis stage

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Objective : Our goal is to study the quantitative variations of the lipid parameters in the chronic hemodialysis in a Moroccan hospital structure and to appreciate the risk lipidic incurred. **Material and method :** We carried out a cross-sectional study of a group of 75 chronic hemodialysis patients at the Ibn Rochd Hospital. We analyzed the following lipid parameters: triglycerides (TG), total cholesterol (CT), low density lipoprotein cholesterol (C-LDL), high density lipoprotein cholesterol (HDL-C), and atherogenicity index (AI = CT / C-HDL). **Results:** Our study included 75 patients, the average age is 44 years, the sex ratio is 39H / 36F, the age of hemodialysis is on average 14 years. We found a significant increase in serum triglycerides. Concerning the metabolism of cholesterol, the most significant anomaly was a decrease in the cholesterol level of high density lipoproteins (HDL-C). Total cholesterol and low density lipoprotein cholesterol did not show a significant increase. The atherogenic index was significantly higher. The prevalence of dyslipidemia was 80% . The most frequent deterioration was the decrease of HDL-C (65%), elevation of TG (36%) and elevation of LDL-C (10%); half of the cases there was an alteration of two to three lipid parameters. AI was elevated (≥ 5) in 33.3% of cases. **Conclusion:** The prevalence of dyslipidemia is high in chronic hemodialysis, the most characteristic abnormalities are elevated triglycerides and lowered cholesterol of high density lipoproteins. Improvement of dyslipidemia is necessary to prevent cardiovascular risk

Radioactive iodine therapy and end stage renal disease

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Objective: The aims of this study were to report the experience of nephrology department and nuclear medicine department in University Hospital Ibn Rochd of Casablanca in CAPD managing, dosimetry calculations and radiation therapy efficiency among three cases in end stage renal disease and differentiated thyroid carcinoma (DTC). **Method:** In our three hemodialysis patients the diagnostic of DTC was obtained after thyroidectomy. First of all, we obtained the patient's consent before peritoneal catheterization. Then, we had trained our patients for self dialysis required to provide a perfect autonomy. CAPD was prescribed with 4 exchanges daily (1.5l/m²). Finally, our three patients received the dose of 50 mCi (1,85 GBq) of radioactive iodine, that is 50% of the required dose in patients with normal glomerular filtration rate. **Conclusion:** With very few published cases, our experience demonstrates that CAPD could overcome the constraints in ESRD requiring treatment irradiation, especially gain autonomy and reduced supply with less risk radiation and obtaining a satisfactory therapeutic response and reduction to the lowest level of exposure of these patients and the people beside.

Polymedication in haemodialysis patients

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Objective: The aim of the study is to analyze haemodialysis patient's prescriptions accordance with recommendation registrations of site gpr and Vidal. **Patients and methods:** we realized a cross sectional and multicentre study, during three months, on 60 chronic haemodialysis patients. The survey allowed collecting treatments prescribed by the nephrologists, or other doctors and those taken without medical prescription. **Results:** the average age of our patients is 43 years old, with the median duration of dialysis is 4 years, 60 % of patients are dialyzed biweekly, against 40% under triweekly. The comorbidity is found in 60 %. The patients take, on average, 5 drugs a day, 2 among them are taken without prescription. The most frequent therapeutic classes, represented by the treatments of phosphocalcic disorders in 98 % of patients, followed by treatments of high blood pressure, in 81 % of patients. Based on the gpr site, the prescriptions are not corresponding to the recommendations, in 72 %. The no adjustment dose is noted in 52 %, with no respect of the chronopharmacology in 60 %. The improper drug indication is noted in 10% of patients. **Conclusion:** The medication in the chronic haemodialysis, exposes to the risk of reducing treatment adherence, developing medicinal interactions and appearance of side effects of drugs. The recommendation conforming reduce medication-related problems in dialysis patients, and subsequently, improve quality of life and result in decreased morbidity and mortality.

Timing of permanent vascular access creation on maintenance hemodialysis

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Objectives: To describe the timing of permanent access creation on maintenance hemodialysis and the justifications for late permanent access creation. **Methods:** This was a cross sectional study of 12 months duration (January-December 2016), carried out at the hemodialysis unit of the Yaounde University Teaching Hospital. We included all consenting adults on chronic hemodialysis for at least 3months. Data was collected from patients' records and direct interviews of patients and family members. Data analysis was done using SPSS version 20 software. Statistical significance was set at a p value < 0.05. **Results:** We included 63 (73% males) patients with a mean age of 50.7 ± 12.4 yrs. Healthcare funding were personal (60.3%), family (36.5%) and insurance (3.2%). Median duration on dialysis was 26 (IQR: 11- 51) months. Hypertension (33.3%), chronic glomerulonephritis (23.8%) and diabetes (20.6%) were the main etiological factors of chronic kidney disease. Only 22 (34.9%) patients had nephrology precare. Only 6 (9.5%) used permanent vascular access at initiation of hemodialysis representing 27.3% of those with nephrology precare. The median duration for creation of permanent vascular access after initiation of hemodialysis was 2 (IQR: 1-4.5) months. Late presentation (57.9%) and financial constraints (31.6%) were the main justifications for late creation of vascular access. The prevalence of permanent vascular access was 43.86% within the first three months of initiation of hemodialysis. Arteriovenous fistula was the main permanent vascular access. The prevalence of permanent vascular access at 6 months, 9 months and 1 year on hemodialysis were 80.77%, 89.36% and 97.83% respectively. **Conclusion:** Maintenance hemodialysis was initiated in most patients without a functioning permanent vascular access due to late presentation.

Impact of metabolic syndrome and malnutrition on mortality in chronic hemodialysis patients

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Objective: to estimate the influence of metabolic syndrome and malnutrition on cardiovascular and global mortality rate. **Methods:** this prospective study was carried out from January 2015 to December 2016. Baseline anthropometric and laboratory parameters were evaluated, and causes and times of mortality were documented. Nutritional status of the patients was assessed using subject global assessment (SGA) and serum albumin levels. **Results:** 120 hemodialysis patients were recruited and followed for 24 months. Mean age was 59 ± 11 years and 60% were men. 55% had metabolic syndrome according to NCEP ATP III. There were fewer patients with malnutrition in the metabolic syndrome vs the nonmetabolic syndrome group (12% vs 32%), but there were no significant differences in cardiovascular mortality (19% vs 7%) or all cause mortality (22% vs 11%), nor in mean survival times (23,86 ± 5,3 vs 23,12 ± 4,32 months). Multivariate analysis showed that independent mortality risk factors were pre-existing cardiovascular disease, total cholesterol and LDL cholesterol. **Discussion:** in the general population, MS is well known to be associated to a higher risk of cardiovascular events. In our study, cardiovascular events presents 75% of the mortality of hemodialysis patients. But based on our results, we conclude that MS does not increase the risk of CVD or all-cause mortality in hemodialysis patients and is consistent with other authors reports. Multivariate analysis showed that independent mortality risk factors were preexisting cardiovascular disease, total cholesterol and LDL cholesterol. Hemodialysis patients with malnutrition had a lower rate of survival than those with MS, and that malnutrition increased the risk of mortality in hemodialysis patients compared with MS so the potential role of malnutrition in the mortality of hemodialysis patients should not be ignored. **Conclusion:** MS was associated with a better nutritional status, but not with cardiovascular or all-cause mortality in the hemodialysis patients.

Isolated prostatic tuberculosis in a patient undergoing chronic hemodialysis: a case report

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Objective: To report a case of an unusual localisation of tuberculosis in a hemodialysis patient. We report the case of a patient who was undergoing on chronic hemodialysis with accidental discovery of prostatic tuberculosis during a pre-transplant renal assessment. **Case report:** M. E. M, aged 52, has been carrying a renal polycystic disease at the hemodialysis stage for 6 years. He had a left nephrectomy in 2014 for suspicion of malignant cystic degeneration. Examination of the piece of nephrectomy eliminates cancer. He had a renal transplant project and we found in his blood test an inflammatory syndrome and a high PSA title. The patient was asymptomatic. A prostatic MRI and later a radical prostatectomy are performed and the diagnosis of prostatic tuberculosis is made on anatomopathological examination. The patient is placed under antituberculous treatment for 6 months with a good clinical and biological evolution. **Discussion:** Isolated prostatic tuberculosis is rare. Despite the frequency of extrapulmonary forms in chronic hemodialysis patients. Also in the general population. Clinical expression is not very specific, so that the diagnosis could be delayed. Its suspicion is based on a bundle of biological and radiological clinical arguments but the diagnosis of certainty is mostly by the anatomopathological examination. Treatment in chronic hemodialysis patients relies on the molecules of the general population, the therapeutic adaptation is made on daily doses and drugs modalities. When the diagnosis is early, the prognosis is generally favorable under well-conducted and sufficient duration of the antituberculous treatment. **Conclusion:** Isolated prostatic tuberculosis is rare and its clinical expression can delay the diagnostic. However, prognosis is favorable when treated even in hemodialysis patients.

Angioplasty of hemodialysis arteriovenous fistulas: retrospective study in ibn sina university hospital of rabat

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objectives: Stenosis are the most common complication of hemodialysis arteriovenous fistulas (AVF). They may cause an increase in venous pressures or a lower blood flow depending on the puncture site. Morphologic diagnosis is based on data from Doppler ultrasound. Management of these stenosis has gained much from progress in endovascular treatment. Percutaneous angioplasty or ultrasound guided angioplasty represent the treatment of choice for most of these stenosis. Our aim is to study the efficiency of this technic. **Methods:** This is a retrospective study conducted from January 1st 2013 to December 31st 2015. It included 173 who had an angioplasty for their AVF in our department. We collected anamnestic data, AVF and stenosis features. **results:** We achieved 216 angioplasty of AVF for 173 patients with a mean age was $53,8 \pm 36,2$ years and a sex ratio of 1,1 F/M. 83 % of AVF treated were brachial fistulas of which 10 % were prosthetic grafts, and 17 % were fistulas of the forearm. 16,1 % of our patients had a restenosis requiring iterative angioplasty. 23 patients (13,3%) had 2 angioplasty, and 5 patients (2,8%) had 3 angioplasty, with average time of restenosis of 10,5 months. Venous stenting was performed for 2,8 % of all the patients. Failure rate was 8,4 %, it can be explained by failure of catheterization, and the unavailability of high-pressure balloon. Stenosis were far from the anastomosis in 75 % of the cases and were perianastomotic in 6,7 %. One angioplasty was performed with ultrasound guidance. **conclusion:** Angioplasty has permitted the extension of fistula life. Our results showed that angioplasty is efficient in the management of the stenosis.

Interest of neutrophil-to-lymphocyte ratio and platelet-to-lymphocyte ratio in monitoring inflammation in hemodialysis

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Objective: We aimed to determine the relationship between PLR, NLR, and inflammation in this particular population. **Methods:** It was a retrospective and monocentric study involving 28 patients (16 women and 12 men) with a mean age of $48,5 \pm 10$ years. they were receiving hemodialysis for ≥ 6 months in the Dialysis Unit of the University Teaching Hospital Ibn Sina of Rabat. Exclusion criteria were: active infection, tumor and hospitalization in the last 3 months. The inflammatory biomarker used is high-sensitive C-reactive protein (hs-CRP).

Results: We didn't found significant correlation between PLR and CRP ($r = 0.4$; $p = 0,84$) or NLR and hs-CRP ($r = 0,36$, $p = 0,057$). As described in literature review, our study found a high incidence of inflammation. Literature demonstrates also that a strict relationship between PLR, NLR and CRP. Data of this study didn't support this finding. It had two main limitations. First, this was a cross-sectional analysis of hemodialysis patients focusing on the relationship between PLR, NLR, and inflammation. Second, the sample size was relatively small. This was not a prospective controlled study, so we cannot draw cause and-effect relationships from our findings. **Conclusion:** Hs-CRP is considered to be the prototypic inflammatory biomarker. Further randomized and controlled studies evaluating the relationship between PLR, NLR, and inflammation are needed given their low cost and accessibility.

Prevalence and determinants of cardiac arrhythmias in chronic hemodialyzed patients at the yaounde university teaching hospital

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Objective: We investigated the prevalence and determinants of cardiac arrhythmias in patients on chronic hemodialysis at the Yaounde University Teaching Hospital (YUTH), Cameroon. **Methods:** This was a cross-sectional study of six months duration (April-September 2016) involving chronic hemodialyzed (at least 3 months) patients with an arterio-venous fistula. After clinical examination, each participant undergoes Doppler echocardiogram, resting electrocardiogram (ECG) and 16 hours period of Holter ECG divided into 6 hours prior, 4 hours during and 6 hours after the second dialysis session of the week. Blood samples for electrolytes and full blood count was also taken at the beginning and the end for the same dialysis session. **Results:** We included 66 patients (77.3% males) with a mean age of 45 ± 10 years and median duration of 31 (15-48) months in dialysis. Atrial fibrillation (4.5%) was the only arrhythmia depicted by resting ECG. Right and left auricle dilation was present in 68.2% and 54.5% respectively. The prevalence of arrhythmias was 90.9%, 81.8% and 77.3% respectively prior, during and after dialysis. Similar prevalence for life threatening arrhythmias ($>$ grade 2 Lown classification) was 31.8%, 27.3% and 27.3%. Male sex, advanced age, right auricle and left ventricular dilation, hypomagnesaemia and dyskalaemia were associated with the occurrence of arrhythmias. **Conclusions:** This study suggests that chronic hemodialyzed patients should have undergo a cardiovascular work up prior to dialysis and regular monitoring of serum potassium and magnesium levels to reduce the risk of arrhythmias potentially fatal.

Outcomes of migrant patients without a stable resident status starting haemodialysis in a swiss university hospital

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Objectives: Migrants without permanent resident status are vulnerable patients in regards of medical care. We analyzed the characteristics and the outcome of these migrant patients starting chronic hemodialysis in our center. **Methods:** Migrant patients without a stable resident status in Switzerland were retrospectively identified among patients who started hemodialysis between 2000 and 2014 in our hospital. Demographic and medical data were recorded by reviewing their medical records. **Results:** Among 607 patients starting hemodialysis within this time period, we identified 28 migrant patients of whom 15 came from Africa (13 from Subsaharian Africa and 2 from North Africa). Eighteen were asylum seekers, 3 had a tourist visa, and 7 were undocumented. Compared to permanent resident patients, migrant patients were significantly younger (mean age 44 vs. 62 years), more of female gender (54% vs. 32%) and had less cardiovascular comorbidities (ischemic heart disease and heart insufficiency present in only 3 and 4 of the patients respectively). Two thirds of the patients had vascular and diabetic causes of ESRD and 36 % were smokers. Seven patients were already hemodialyzed before arriving in Switzerland. Seventeen obtained a permanent resident status, 5 are still waiting for regularization, 4 left Switzerland and 2 were lost to follow-up. Among the 22 patients who stayed in Switzerland, 2 died while on hemodialysis, 11 were transplanted of whom one died accidentally after being transplanted and 9 were still on hemodialysis. Mean time from first dialysis in our country to transplantation was 270+132 weeks. **Conclusions:** In our center, about 2 migrant patients per year start hemodialysis without a permanent resident status in Switzerland. They are significantly younger, more often women, and had less cardiovascular comorbidities than our permanent resident patients. Eventually, 71% obtained a permanent resident status and half of them received a renal transplant.

CKD-MBD in morocco, results and fulfillment of international recommendations, multicentric study

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Objective: Our study aimed to assess the prevalence of CKD-MBD, and to evaluate adhesion to main recommendations in Morocco. **Methods:** It is a cross-sectional obrevationalmulticentric study, using data from 10 haemodialysis establishments. we included adult patients on haemodialysis for at least 3 months, and collected data on demographic, clinical, biological and therapeutic parameters. **Results:** We had 486 patients. Median age was 53,3 +/- 12,2 years. half of patients were men, Median BMI was 21,7 +/-5,2 kg/m². One third of patients were on a two times a week dialysis schedual. Dialysis vintage was 97+/- 34 months. Causal nephropathies were diabetic in 28% and hyperetensive in 16% of our patients. Half of our patients had osteo-articular complains, 11% had pruritus, and 9% had skeletal deformities. Half of our patients were on alphacalcidiol, 86% on calcium binders, and 5% on non calcium binders. Calcimimetics were taken by 2,46% of patients. Five percent undergoneparathyroidectomy. Fulfillment of KDIGO 2009 recommendations was achieved in 60, 28 and 26% for calcemia, phosphatemia and PTH levels respectively. Percentage of patients fulfilling all critiria was 24,27%. **Conclusion:** Although KDIGO targets were more flexible, they seem difficult to reach in Morocco, in part due to the expensiveness of this condition's treatment.

White-coat hypertension and masked hypertension: prevalence and risk associated factors in hemodialysis patients in Dakar

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Objectives: The aims of this study were to evaluate prevalence of white coat and masked hypertension in hemodialysis patients and determinate risks associated factors. **Methods:** It was a multicentric, cross-sectional, descriptive and analytical study during April 2016 to June 2016. The eligible patients must have been on dialysis for at least three months and were consent and able to take BP at home using an approved electronic BP monitor and recording it on a self-measurement plug. A nurse did a conventional measure of blood pressure before and after dialysis. **Results:** Forty-nine patients were eligible, 3 were excluded and 46 patients were included. The mean age was 45.57 years \pm 14.11 with a sex ratio of 1.42. The mean duration of dialysis was 57.96 months \pm 34.86. The mean BP with home blood pressure monitoring (HBPM) was 140.88 \pm 20,52 for systolic and 88.92 mmHg \pm 13,35 for diastolic. The prevalence of hypertension with HBPM was 71.7%. With conventional measure, mean pre-dialysis BP was 145.98 \pm 18,78 for systolic and 86.03 mmHg \pm 13,22 for diastolic. The mean post-dialysis BP was 140.79 \pm 24,2 for systolic and 85.6 mmHg \pm 14,52 for diastolic. Hypertension was found in 82.6%. Using the two measuring methods, masked hypertension was present in 8 patients (17.5%), white-coat hypertension in 6 patients (13%). Controlled permanent hypertension was found in 7 patients (15.2%) and uncontrolled hypertension in 25 patients (54.3%). Statistically significant correlation was found between age and white coat hypertensive. **Conclusion:** Proportion of masked and white coat hypertension in our study was significant. This should alert clinicians because of the poor cardiovascular prognosis associated with hypertension. **Keywords:** self-measurement - conventional measurement - hemodialysis - hypertension

Prevalence and determinants of acute haemodialysis complications during the first three sessions in the two haemodialysis centers of Yaounde.

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Objectives: This study aim to determine the prevalence and determinants of acute haemodialysis complications in Yaounde, Cameroun. **Methods:** This was a prospective study of three months duration (January-March 2016) in haemodialysis centers of Yaounde University Teaching and General Hospitals. We followed the first three haemodialysis sessions of two hours each of all consenting adults' patients using a polysulfone membrane and bicarbonate. We examined the patients before, during and after each session. All clinical manifestations linked to haemodialysis and occurring up to 24 hours following the third session dialysis were recorded as complications. **Results:** We included 53 patients (71.7% males) with a mean age of 51 \pm 17.6 years among which only 49 reached the third session. Two patients died after each first two sessions and 153 haemodialysis were followed. Haemodialysis was initiated in emergency in 83% of cases. Uremic encephalopathy (49%) and pulmonary edema (34%) were the main indications of haemodialysis. Forty three haemodialysis sessions presented acute complications corresponding to an incidence rate of 28.1 complications for 100 sessions of dialysis-days. Hypotension (26.4%) and hypertensive crisis (15.1%) were the most frequent complications. The mortality rate was 4.6 for 100 patient-days. Advanced age, diabetes and hyperkalemia were risks factors of the occurrence of complications while hypotension and haemorrhage were associated with mortality. **Conclusion:** This study revealed a higher incidence of acute haemodialysis complications and mortality rate. Efforts should be made for early referral of patients requiring haemodialysis.

Epidemiology of chronic kidney diseases in the Republic of Guinea; future dialysis needs

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Objective: The objective of this study was to evaluate the prevalence of CKD, ESRD and access to supportive therapies. **Patients and Methods:** 579 CKD patients (304 males; mean age: 44 ± 16 years) were admitted into Conakry nephrology department, the only centre in the Republic of Guinea, between 2009 and 2013. Most patients (63%) resided within Conakry (the capital), 12.5% came from lower Guinea, 11.7% from middle Guinea, 7.9% from upper Guinea and 4.8% from forest Guinea. **Results:** Reasons for referral were increased serum creatinine (49.5%), hypertension (27%) and diffuse edema (17%). Also, 11% were diabetic, 12.5% were smokers, 17% were HIV-positive, 8.3% were HBV-positive and 15% were HCV-positive. The most frequent symptom at admission was nausea/vomiting (56%). Upon admission, 70.5% of patients already had ESRD. Although no kidney biopsies were performed it was assumed that 34% and 27% of patients had vascular nephropathy and chronic glomerulonephritis, respectively. Of the 385 ESRD patients, only 140 (36.3%) had access to haemodialysis (two sessions/week, 4 hours each). Most patients that received haemodialysis resided within the Conakry region ($p < 0.0001$). There were significant associations between mortality and (i) terminal stage of CKD ($p = 0.0005$), (ii) vascular nephropathy ($p = 0.002$), and (iii) nephropathies of unknown origin ($p = 0.0001$). **Conclusions:** A fourfold increase in haemodialysis machines is needed in Conakry, plus four new nephrology/haemodialysis centres within the Republic of Guinea, each holding ≥ 30 haemodialysis machines.

Investigating risk factors of chronic kidneys disease in yaounde (centre region, Cameroon): a case-control study

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Objective: To assess risk factors of chronic kidney disease (CKD) in Yaounde (Centre region, Cameroon). **Methods:** It was a case-control study. Cases were CKD patients, either already dialysed or not, attending the General Hospital (YGH) and the University Teaching Hospital (YUTH) in Yaounde. Controls were recruited among individuals with glomerular filtration rate (GFR) greater than $60 \text{ ml/min/1.73m}^2$, without urine abnormalities as assessed using a dipstick technique. Pregnant women and amputees were excluded. Clinical data were collected using a questionnaire. A calibrated blood smear was performed, both for cases and controls, to search for *Loa loa* microfilariae. For controls, in addition to urine dipstick, serum creatinine measurement was performed, and venous blood collected for the diagnosis of HIV, HBsAg and AcHCV. **Results:** A total of 398 participants were included, with equal number in both groups. A median age was 45.06 ± 14.07 ($p=0.926$). The proportion of men was statistically greater than women (54.8% against 45.2%). Apart from HVB, HVC and Loasis other potential risk factors were significantly more prevalent among cases compared to controls. The average glomerular filtration rate was $106.1 \text{ ml/min/1.73m}^2$ in the control group, and $17.2 \text{ ml/min/1.73 m}^2$ among cases. Risk factors associated with CKD found in this study were Acute Kidney Injury history (OR : 11.66; $p : 0.025$), hypertension (OR : 4.85; $p < 0.0001$), smoking (OR : 4.36; $p 0.004$), diabetes (OR : 3.06; $p : 0.006$) and HIV (OR: 2.89; $p : 0.020$). In the old persons in particular, obesity were additional risk factor associated with CKD. **Conclusion:** Risk factors of the CKD found in Yaounde appear similar to those found in developed countries. Unlike previous findings in developing countries, most of the risk factors associated with CKD in our case-control study were non-communicable. **Key words:** Risk Factors, chronic kidney disease, case-control study, Yaounde, Cameroon.

Socioeconomic status of CKD patients attending the Nephrology units of UNTH, Ituku-Ozalla, South-east Nigeria: a cross sectional study

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Objective: The study aimed to determine the SES of CKD patients attending Nephrology units in University of Nigeria Teaching Hospital and investigate the association between SES and prevalence of CKD. **Methods:** cross sectional descriptive design was used. One hundred and forty five consecutively recruited CKD patients participated. The required information was collected using a pretested questionnaire. Principal component analysis was used to classify the SES into five quintiles. **Results:** majority of the patients with severe CKD (stages 4 and 5) constituting 17.2% and 39.3% respectively were from the lower SES. There was a significant association between SES and CKD, χ^2 37.74, df 2, $p < 0.001$. There was also significant correlation between SES and age of the patients; place of residence; hypertension history; ownership of some household assets; source of drinking water; source of cooking energy; and type of toilet facility. Multiple linear regression analysis demonstrated that type of toilet facility was the best predictor of SES. **Conclusion:** this study demonstrated that severe CKD was associated with lower SES. Type of toilet facility was the best predictor of SES. It is recommended that both governmental and non-governmental agencies should help these patients with some form of health insurance to alleviate their suffering. **Key words:** socioeconomic status, chronic kidney disease, sub-Saharan Africa, principal component analysis

Evaluation and nutritional care in hemodialysis patients: experience of a French dialysis center

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CHU Mohammed VI Oudja

Objectives : The objectives of our study were to assess the nutritional status of our HDC patients and to determine risk factors for poor nutritional parameters. **Patients and Methods:** We conducted a prospective, interventional, single-center on chronic hemodialysis patients. **Results:** 54.8% of our patients were females. The mean age was 73.71 ± 13 [32 -94] years. Initial nephropathy was diabetic in 47.6% and vascular in 16.7%. 88.1% had arterial hypertension, 52.4% were diabetic and 61.9% had dyslipidemia. The median duration of dialysis was 30.5 [3 -120] months. The mean KT / V urea was 1.42 ± 0.26 . The mean body mass index was 26.69 ± 5.09 Kg/m². Hypocalcemia was noted in 4.8% of cases, hyperphosphataemia in 40.5% and hyperparathyroidism in 38.1% of our patients. The medium albumin was 35.8 ± 5.1 g/l [19 -44]. 64.2 % of our patients had poor nutritional statue, 19% have severe malnutrition. The appetite was average at 23.8% of our patients and bad in 7.1%. **Conclusion:** The monitoring of the nutritional status of chronic hemodialysis patient must be at the center of concerns nephrologists, because of the frequency and severity of the CPD.

Risk factors for cardiac calcifications in a hemodialysis population

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Objectives: To evaluate the risk of heart calcifications factors in a dialysis population. **Patients and methods:** We performed a prospective, interventional, single-center on HDC 42 patients with chronic dialysis center. We evaluated risk factors for cardiac calcifications in patients to assess appropriate therapeutic strategies. **Results:** 54.8% of our patients were females, mean age 73.71 ± 13 [32 -94] years. Cardiac calcifications were present in 21.4% of our patients. 88.1% were hypertensive, 52.4% diabetic and 61.9% dyslipidemic. Initial nephropathy was diabetic in 47.6% and vascular in 16.7%. The median duration of dialysis was 30.53 [3 -120] months. The mean KT / V urea was $1.42 \pm 0.26\%$. The mean body mass index was 26.69 ± 5.09 Kg /m². Hypocalcemia was noted in 4.8% of cases, hyperphosphataemia 40.5% in and hyperparathyroidism in 38.1% of our patients. Statistical analysis showed that uric acid (OR: 1.01, CI: 1.00 - 1.02, p: 0.03), and the flow of the FAV (p: 0.08) were significantly associated with risk of cardiac calcifications in our patients while other factors have not been identified as (Serum Calcium p: 0.13, phosphoremia, p: 0.54, PTH p: 0.73 and proBNP p: 0.11). **Conclusion:** This review attempts to summarize recent evidence pointing the usefulness of the echocardiography in the detection of clinical and subclinical cardiac dysfunction, stratification of cardiovascular risk and assessment of intervention strategies.

Overt kidney disease in senegalese diabetic patients : a community-based survey in saint-louis region

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Objective : To describe the prevalence of overt kidney disease in adult diabetics living Saint-Louis region (Senegal). **Methods :** A cross-sectional survey including 1037 adults in Saint-Louis. Clinical and biological parameters were collected during home visits completed by laboratory analyses at university hospital. Diabetes was defined as fasting blood glucose ≥ 1.26 g/L or use of glucose-lowering medications. Overt diabetic kidney disease was defined as presence of persistent macroalbuminuria (urine albumin-to-creatinine ratio ≥ 300 mg/g) and/or estimated glomerular filtration rate (eGFR) < 60 mL/min/1.73 m²). Data were computed in MSExcel 2007 and analysed with Stata 12.0. **Results:** Among a total of 131 diabetic patients, 3.7% (95% CI= 1.4%-9.8%) presented overt diabetic kidney disease. Their mean age was 46.2 ± 11.8 years and sex-ratio was 0.7. Among these patients 83.3% were hypertensive, 12.5% presented nephrotic range proteinuria and 20.8% had eGFR < 30 mL/min/1.73 m². Prevalence of obesity, dyslipidemia and tobacco use in diabetic patients with kidney disease were 29.2%, 23% and 8.3% respectively. Ninety-three percent of patients were not aware of their kidney disease and two (4%) had seen previously a nephrologist. After multivariate analysis, age (OR=1.6 ; 95% CI= 1.2-5.7) was associated with kidney disease in diabetic patients while a significant association was not found with gender, diabetes duration, glycemia and hypertension. Only 15% of patients were taking renin-angiotensin-aldosterone system inhibitors. **Conclusion:** Kidney disease in frequent diabetic adult population living in Saint-Louis. Early detection and management should be promoted in order to prevent progression to end-stage renal disease.

Epidemiological profile of chronic kidney disease inside the family of haemodialysed patients in Sub-Saharan Africa: A hospital-based study in Cameroon

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Objectives: To determine prevalence of chronic kidney disease and risk factors frequencies among the siblings and spouses of haemodialysed patients. **Methods:** We conducted a cross-sectional study, from December 15th 2013 to April 15th 2014 at the haemodialysis unit of Yaounde General Hospital. This was a pilot study in our setting. Only the first degree relatives and spouses of haemodialysis patients were included. Necessary clinical and biological data were collected; Blood pressure was verified the next day when high, proteinuria was tested by dipstick in random urine and control after one week and three months. Diabetes was asserted using fasting blood glucose and verified 48 hours when value was abnormal. Creatinine dosage was done by a local reference laboratory. The treatment of data was realized using SPSS version 18. The statistical significance was fixed at p -value <0.05 . **Results:** A total of 92 members of 40 patients in maintenance haemodialysis were selected. Among the family members, 13% were parents ($n=12$), 11% were spouses ($n=10$), 38% were siblings ($n=35$) and 38% were children ($n=35$). The prevalence of chronic kidney disease among the family members was 14.13 %. In the group of relatives the prevalence was 15.8% and null with spouses. The prevalence of risks factors was 60.8% and the main risks factors were: hypertension (30%), consumption of medicinal herbs (22%), obesity (18%) and consumption of analgesics/non steroidal anti-inflammatory drugs. Consumption of medicinal herbs was more observed among the group of family members compared to their control ($p=0.01$, $OR=4$), when obesity was high among the control group ($p=0.003$, $OR=0.33$). **Conclusion:** The prevalence of chronic kidney disease and classical risk factors are high among relatives of patients in maintenance hemodialysis. This study suggests a preventive measure for the chronic kidney disease risks factors in the families of haemodialysed patients

The assessment of economic cost of acute kidney injury in a tertiary hospital in Cameroon: prospective cohort study

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Objectives: To determine the average total cost of the management of acute kidney injury in each patient; specifically, to determine the direct and indirect costs of this pathology. **Materials and method:** We used a prospective cohort study design, over a study period of four months in a tertiary hospital in Cameroon: Douala General Hospital. All patients with an acute kidney injury hospitalised in the Internal Medicine service were included. Data on direct and indirect costs were assessed using a questionnaire. The direct cost was estimated from the cost of laboratory investigations, treatment of complications, dialysis treatment and other hospital expenses. Pharmacy receipts, hospital bills, price tags of the hospital, receipts of patient and guardian expenditure were used in the calculation. Indirect cost was estimated from salary allocations of the ongoing year by the public service. Linear regression analysis was used to evaluate the association between cost and socio-demographic and clinical variables. **Results:** Forty five patients were treated for AKI during our study period; 03 patients were excluded, 02 for AKI on CKD and 01 during follow-up. Hence, 42 patients participated during this study. 22 (52.4%) patients were women. The mean age was 55.5 ± 19 years. About 52% of our patients had a monthly revenue of $\leq 100\,000$ CFA (€152.45). Expenses were covered by insurance in 21% of cases. The average total cost for the management of acute renal failure in our study was $977\,556.0 \pm 3\,170\,467$ CFA (Median: 402 473 CFA _€613.57). The direct cost was $455\,444.8 \pm 383\,293$ CFA (Median: 335 815 FCFA _€511.95) represented 47% of total cost. The indirect cost was $521\,111.2 \pm 2\,969\,310$ CFA (median: 47 260 CFA _€72.05) represented 53% of total cost. The majority of costs being due to treatment of aetiology, hospitalisation, dialysis and Cost due to definitive incapacity caused by early mortality. **Conclusion:** The cost of the management of acute kidney injury in Cameroon where the minimum wage is 36 270 CFA (€55.29) is high. **Key words:** acute kidney injury, total cost, direct cost, indirect cost, Douala.

Hyperuricemia in patients with chronic renal failure in the General Hospital of National reference of N'Djamena (Chad)

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Objective: To seek a link between chronic kidney disease and hyperuricemia. **Materials and methods:** This is a descriptive and analytical study conducted at hemodialysis unit and cardiology service of General Hospital of National reference of N'Djamena (Chad) from 1st January to 1st October 2013 (10 months). We included all chronic kidney disease patients hospitalized in hemodialysis unit and cardiology service who presented associated hyperuricemia. **Results:** There was 712 CKD patients who were hospitalized. Among them, there were 108 patients who were included in the study and who had hyperuricemia as a prevalence of 15.20%. The average age of patients was 35.5 years and the sex ratio was 3/1. The age group between 40 to 60 years represented 54.6%. There were 41.7% of traders. Hypertensive patients accounted for 49.1%; association of diabetes and hypertension was noted in 12.90%. Renal insufficiency was moderate in 43.5% of patients. Hyperuricemia was present in more than 90% of patients. Profession, age, hematuria, proteinuria, hypertension were statistically positively related to hyperuricemia. Treatment consisted of prescribing Allopurinol in 84% of patients. In more than 11% of patients the progression was unfavorable. **Conclusion:** The implication of hyperuricemia in chronic kidney disease has been proved in several recent studies. However, randomized studies at very long scales have to be carried out to conclude from its real impact on the prevention and treatment of chronic kidney disease. **Key words:** hyperuricemia, chronic renal disease, Chad. Abbreviations: GFR: glomerular filtration rate; CKD: chronic kidney disease; BMI: body mass index

Chronic kidney disease (CKD) survey in Mauritania (series of 453 patients)

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Objective: To describe the major epidemiologic, etiologic, therapeutic & evolutionary aspects of chronic kidney disease patients in the CENTRE HOSPITALIER NATIONAL (CHN) of Nouakchott. **Methods:** This was an observational, retrospective study of medical records of patients admitted to the nephrology- hemodialysis department in CHN. The study period was from January 1st 2009 to December 31 2011. All the patients who have been admitted to the department and diagnosed with CKD during this period have been included. **Results:** A total of 784 patients have been admitted to the department during the study period, among them 453 patients were diagnosed with CKD (prevalence= 57,7%). The annual incidence was 151 cases per year. The average age of patients was 43 years. Main etiologies were Nephroangiosclerosis (54%) and diabetic nephropathy. These patients were mostly oriented and consigned to our department by the emergency department and the outpatient clinic of CHN. An emergent hemodialysis session was necessary in 84,1% of patients. Two hundred and ninety-six (296) patients benefited from hemodialysis as a chronic renal replacement therapy. Sixty nine (69) patients have deceased (15,2%). No patient have benefited from a kidney transplant. **Conclusion:** The creation of a CKD national register is mandatory for a better determination of the prevalence and incidence of CKD in Mauritania.

Factors associated with late presentation of patients with chronic kidney disease in nephrology consultations in Douala

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Objectives: To determine the prevalence and factors associated with LP of CKD patients in nephrology consultations in Douala. **Methods:** We performed a cross-sectional study in the nephrology units of the Douala General and Laquintinie hospitals, where we included all consenting incident CKD patients seen between November 2015 and April 2016. Data collected included: participant's socio-demographic characteristics, the search of CKD diagnostic criteria during their follow up, therapeutic itinerary prior to presentation, clinical and laboratory parameters at presentation, knowledge on CKD and attitude towards dialysis. LP was defined as a glomerular filtration rate (GFR) less than 30ml/min/1.73m². It was considered physician-related whenever no CKD screening was done in front of a risk factor or when no referral to nephrologists was done at early stages; and patient-related whenever patients did not have recourse to hospital care while symptomatic or when a referral decision was disrespected. Data were analyzed using STATA 11 software and $p < 0.05$ was considered statistically significant. **Results:** We included 130 patients with a mean age of 53.4 ± 14.7 years and a male predominance at 60.8%. 40.5% of participants came from a 4th category hospital, 58.7% were referred by an internal medicine physician and 10% had recourse to complementary and alternative medicine (CAM) prior to presentation. At presentation, 70.8% were symptomatic, 66.2% had severe albuminuria, 53% had CKD stage 5, 86.12% were poorly graded on knowledge and about 49% of patients that knew dialysis had a negative attitude towards it. The prevalence of LP was 73.9%, 55.2% of which was physician-related, 50% patient-related and 5.2% both. Being accompanied ($p=0.038$), a level of education below university level ($p=0.025$) and the recourse to CAM ($p=0.008$) were associated with LP. **Conclusion:** The prevalence of LP is high in Douala, attributed to physician's practical attitudes and patient's socio-cultural behaviors. Emphasis should therefore be laid on physician's ability to systematically screen and timely refer CKD patients, as well as on CKD awareness in the general public. **Key words :** Late presentation, chronic kidney disease, nephrology, Douala.

Prevalence and risk factors of chronic kidney disease among healthcare workers at Kamenge University Hospital:

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Objective : To determine the prevalence and risk factors of chronic kidney disease (CKD) in healthcare workers at Kamenge University Hospital. **Methods:** This is a descriptive and analytical survey among 182 healthcare workers by screening urinary abnormalities on dipstick. Patients underwent assessments at baseline and 3 months later. Glomerular Filtration Rate (GFR) was estimated using Cockcroft-Gault (CG) method. Patients were classified at month 3 with or without CKD and into various CKD stages using the National Kidney Foundation definition. Risk factors for CKD were analyzed using Fisher's Exact Test with $p < 0.05$ considered as significance. **Results:** Mean age of the participants was 34 years, 158 (86.8%) were aged less than 45 years and females were 98 (53%). The weight was normal in 111 individuals (61%), 55 were overweight (30.2%) and 16 (8.8%) obese. Using CG method, prevalence of CKD was 14.2% representing 26 patients of whom 15 (57.7%) were classified as stage I, 8 (30.80%) as stage II and 3 (11.50%) as stage III. Among CKD patients with urinary abnormality, isolated proteinuria was 8.2%, isolated leucocyturia 2.2%, proteinuria associated with leucocyturia 3.3% and association haematuria- proteinuria 0.5 %. The risk factors for chronic kidney disease were age ≥ 60 years ($p = 0.03$), obesity ($p = 0.03$), hypertension ($p = 0.03$), hepatitis B ($p > 0.007$). **Conclusion:** Chronic kidney disease is a reality in Burundi. Early screening and management of risk factors constitute a pillar of its prevention and its regression. **Keywords :** Chronic kidney disease, prevalence, proteinuria, risk factors, Burundi.

Prevalence and risk factors for chronic renal failure after ten years of socio-political crisis in Cote D'Ivoire: an analytic study

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Objective: To describe the current profile of CKD after long time of socio-political crisis in our country. **Patients and methods:** This is a descriptive retrospective study of patients admitted for CKD during the period from January 2010 to December 2014 in the Internal Medicine Department of the university hospital of Treichville in Abidjan. CKD is defined by a glomerular filtration rate below 60 ml/min according to MDRD formula, and this for at least 3 months. **Results:** We collected 252 cases of CKD out of 3573 patients recorded during the study period that is a prevalence of 7%. The mean age was 39.6 ± 14 years with extremes ranging from 15 to 83 years. We observed a male predominance (sex ratio 1.21). According to the MDRD formula, CKD was at stage 3 (2.4%), at stage 4 (3.2%) and at stage 5 (94.4%). The etiologies were dominated by hypertension in 59.9% of cases, followed by chronic glomerulonephritis (25%), by HIV infection (9.1%) and diabetes (4.8%). In bivariate analysis, hypertension was the cause of CKD in 48.8% in patients under 35 years, in 66.4% in patients between 35-64 years and in 85.4% in patients ≥ 65 years ($p = 0.001$). Chronic glomerulonephritis was the cause of CKD in 40.2% in patients under 35 years, in 14.3% in patients between 35-64 years, and in 4.8% in patients ≥ 65 years ($p = 0.0001$). **Conclusion:** Comparing with the existing data, the proportion of hypertension as a risk factor for CKD more than doubled. **Keywords:** Chronic kidney disease, Hypertension, Human Immunodeficiency Virus, Diabetes

Prevalence and Correlates of Chronic Kidney Disease in a Group of Patients with Hypertension in the Savanah zone of Cameroon

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Objective: To study the prevalence and risk factors of CKD in a group of patients with hypertension in a Savanah zone in Sub-Saharan Africa. **Methodology:** We carried out a cross-sectional study between January and May 2016 in the Savanah zone of Cameroon. Participants were adults ≥ 18 years of both sexes, who had a diagnosis of hypertension. Patients underwent a comprehensive clinical, biological, and electrocardiographic evaluation. **Results:** A total of 400 patients with hypertension were included, of whom 268 (67%) were females. Their mean age was 54.16 ± 11.17 years. Hypertension was controlled in 30.5% of patients. Twelve percent (12%) had a positive urine dipstick for proteins. The mean GFR was 75.27 ± 24.87 ml/min/m^{1.73}. The prevalence of CKD was estimated at 32.3%. Stage 3A CKD was the most frequent (62.01%). The main comorbidities were anemia (44.5%), obesity (39.75%), diabetes (32%), consumption of traditional medicines (15.75%), and hyperuricemia (10.75%). After a multivariate analysis, age >50 years (aOR: 1.75, [95% CI: 1.06 – 2.89], $p=0.027$), female sex (aOR: 2.21, [95% CI: 1.29 – 3.78], $p=0.0035$), obesity (aOR: 1.58, [95% CI: $p=0.026$]) and the hyperuricemia (aOR: 3.67, [95% CI: 1.78 – 7.58], $p=0.0004$) were independently associated with CKD. **Conclusion:** The prevalence of CKD in adults with hypertension was high. This was associated with age greater than 50 years, female sex, obesity and the hyperuricemia.

Prevalence and associated factors of chronic kidney disease in antiretroviral-naïve patients with HIV in Cameroon

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Objective: To determine the prevalence of chronic kidney disease (CKD) and associated factors in newly diagnosed HIV patients in Cameroon. **Methods:** A cross sectional study carried out from January to June 2014 in the HIV clinic of the Garoua Regional Hospital in northern Cameroon. All consenting patients newly diagnosed for HIV and without antiretroviral therapy were included. Patients with abnormal kidney functions defined as eGFR < 60 ml/min/1.73m² and/or urinary abnormalities were reevaluated 3 months later. Definition and classification of CKD was based on the KDIGO 2012. Logistic regression was used to identify factors associated to CKD. **Results:** We included 398 participants, 72.1% female; mean age 35.86±10.18 years. 75.13% were at stage 3 of WHO classification and 14.82% at stage 4. The median CD4 count was 192 cells/ml (range: 1–1665 cells/ml). Mean eGFR was 97.17 ml/min/1.73m². Proteinuria accounted for 36.18%, hematuria for 3.27% and leucocyturia for 1.51%. Prevalence of CKD was 44.7% (178/398) and 9.05% (36/398) subjects had eGFR < 60 ml/min/1.73m² with 4 (1.01%) at end stage kidney disease. Factors independently associated to CKD were: Age ≥ 35 years (OR : 2,19 ; CI : 1,37-3,50 ; p = 0,01) , CD4 < 200 cell/min (OR : 3,83 ; IC : 2,44-6,06 ; p = <0,001), WHO Stage 4 (OR : 1,93 ; IC : 1,03-3,62 ; p = 0,04). **Conclusion:** This study suggests a high prevalence of CKD among newly diagnosed HIV patients in Cameroon, Screening of CKD should be routinely performed before initiation of ARV treatment. **Key Words:** Prevalence, CKD, HIV, Garoua, Cameroon

Trends of serum creatinine values in a group of Cameroonians

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Objective: To determine the distribution of Serum Creatinine values in Cameroon. **Methods:** This was a retrospective analysis of Serum creatinine (SCr) values from a national reference laboratory in Cameroon (Centre Pasteur of Cameroon, Yaounde). We included all SCr assays performed from January to December 2016. We excluded records with missing data for age and sex. We assayed SCr by the enzymatic method. The results were considered significant when p < 0.05. **Results:** A total of 15647 of the 16385 SCr assays performed were included in our analysis. The median age of participants was 50.7 (IQR 36.6-62.0) years, females accounted for 52.7%. SCr values ranged from 0.27mg/l to 320.0 mg/l with a median of 8.3 (IQR 7.0-11.0) mg/l. The range of SCr was 7.0 (IQR 6.0-9.0) for females and 10.0 (8.0-12.0) for males (p < 0.0001). The distribution of SCr values was: <5 mg/l (4.9%), 5-15 mg/l (86.5%), >15- < 20 mg/l (2.9%), 20- < 40 mg/l (3.6%), and ≥ 40 mg/l (2.2%). The median SCr values in mg/l, stratified by age group were 4.5 for < 20 years (IQR 2.0-8.0), 7.7 (IQR 6.0-10.0) for 20-39 years, 8.5 (IQR 7.0-11.0) for 40-59 years, 9.0 (7.0-11.0) for 50-59 years and 9.95 (8.0-14.9) for >60 years. SCr levels > 15 mg/l was significantly higher in males compared to females (12.4% vs 5.3%, p < 0.0001). **Conclusion:** About 87% of serum creatinine values range between 5mg/l-15mg/l probably reflecting the normal range of SCr in Cameroonians. As expected, SCr values were lower in women and children. About 9% of SCr values were >15mg/l. **Key words:** Serum Creatinine- Mean value- Distribution.

Knowledge, attitudes and practices of traditional healers regarding kidney diseases in Kinshasa, the Democratic Republic of Congo.

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Cliniques Universitaires de Kinshasa

Objective: To assess the knowledge, attitudes and practices of traditional healers concerning the kidney, its role as well its diseases. **Methods:** In a cross sectional study, an exhaustive sample of 2564 traditional healers from four districts (Tshangu, Mont Amba, Funa and Lukunga) composing the city of Kinshasa were interviewed between August 2013 and March 2014 to collect their opinion on kidney and diseases. **Results:** All traditional healers interrogated had limited knowledge on kidney (i.e. 70% ignored the existence of kidney in women), urine origin and kidney diseases symptoms. To diagnose kidney diseases, traditional healers usually used the following tools: revelation (26%), symptoms of patients (23%), traditional equipment (20%), modern equipment (such as optic microscope, 12%), results from modern medicine (8%), saliva (5%) and traditional ritual (5%). The kidney diseases symptoms considered by traditional healers were: back pain (54%), urinary disorders (20%), infertility (10%), abdominal pain (7%), and not specified (9%). Medicinal plants used for treatment of kidney symptoms included *Aloes vera*, *zingiber officinalis**, *cucurbita maxima*, chinese products and other not identified. **Conclusion:** Although, traditional healers have limited knowledge on kidney and its diseases, they continue to provide some products which are potentially nephrotoxic. Promoting the safe and effective use of traditional medicine (TM) by regulating, researching and integrating TM products, healers, and practice into health systems are needed.

Evaluation of factors affecting the progression of chronic kidney disease beyond ace-inhibition in kwazulu-natal (south africa)

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Objective: To evaluate the factors affecting the progression of chronic kidney disease beyond ace-inhibition **Methods:** This is a retrospective cohort study using the medical records of 300 patients attending the outpatient Renal Clinic department at Inkosi Albert Luthuli Central Hospital for the period January 2007 – December 2009. The average patient age was 43 years. The patients were followed up for 24 months following their first clinic visit. Socio-demographic (age sex, residence) and clinical characteristics including estimated glomerular filtration rate (eGFR), blood pressure, BMI (body mass index), proteinuria, haemoglobin, cholesterolemia, uricaemia were recorded. Treatments received including ACE inhibitors, statins, non-dihydropyridine calcium channel blockers (NDCCB), Beta blockers were also recorded. Patients were divided into 2 outcome categories, according to changes in eGFR: patients with eGFR decline of 1ml/min/year or less and those with accelerated eGFR decline(>1ml/min/year). Data analysis using SPSS version 23 (IBM) comprised of descriptive tests and logistic regression analysis (expressed as OR (odd ratio) and confidence interval) for the study of the association of above characteristics with patients' outcome. **Results:** ACE inhibition was used by 92% of patients. Uricaemia and BMI were associated with worsening of eGFR decline OR: 1.012[1.003-1.020] p=0.007 and OR: 3.775[1.116-12.766], p=0.033 respectively. The use of carvedilol and NDCCB was associated with a reduction of the decline of eGFR with OR: 0.144[0.207-0.953] p=0.037 and OR: 0.543[0.329-0.884], p=0.016 respectively. No significant association was found between eGFR changes and daily proteinuria or cholesterolemia. The aetiology of the chronic kidney disease did not affect the rate of progression of eGFR. Patients with high uric acid levels were more prone to progression of chronic kidney disease irrespective of the aetiology. **Conclusion:** These results suggest that beyond ACE inhibition, uricaemia and BMI accelerated while the use of carvedilol or NDCCB delayed the progression of chronic kidney disease patients in KwaZulu-Natal.

Very elderly diabetic type 2 patients: Do complications are higher than patients less aged?

Fethia Hamdi, boutaleb rajaa

Objective: to assess renal progression and the occurrence of cardiovascular events in a prospective cohort of elderly diabetic patients. **Methods:** This is a prospective study started in January 2010 and conducted at the Reference Center for Chronic Diseases in Oujda, Morocco (Eastern Morocco). Inclusion criteria targeted patients who had type 2 diabetes, were up to 45 years and had been regularly followed in nephrology consultation for at least 48 months. We have identified three groups of patients according to the age of patients. **Results:** Out of 652 T2D patients followed regularly in nephrology, 43.6% were 45 to 64 years old (Group 1), 35% were 65 to 75 years old (Group 2) and 21.5% were over 75 years old (Group 3). Arterial hypertension was observed in 29.6%, 47.8% and 39.3% in groups 1, 2 and 3 respectively (p30mg/day) was observed in 68.7%, 71.1% and 67.2% in groups 1, 2 and 3 respectively. At the end of the follow up, rapid renal progression was observed in 17.4%, 30.3% and 29.3% in groups 1, 2 and 3 respectively (p=0.001) and cardiac events occurred in 6.7%, 17.5% and 13.6% in groups 1, 2 and 3 respectively (p=0.001). The comparison of many parameters between the time of enrollment and the end of the study in each group of patients showed the following results. In group 1, we found for albuminuria 70 < mg/day (p=0.001) respectively between the time of enrollment and the end of the study.

Conclusion: Despite the coexistence of very advanced age and the presence of diabetes, the risks of renal and cardiovascular disease remain identical in the elderly patient and very elderly. Are the latter more aware and adhere better to treatment? Is there a reversal of the relationship between age and cardiovascular risk beyond 75 years?]20 - 148[vs 55]32 - 217[mg/day (p=0.002) and in group 3, we found for albuminuria 71]25 - 176[vs 65]41 - 230[0.001), in group 2, we found for albuminuria 74. **Keywords:** Type 2 diabetes, elderly, very elderly, renal progression, cardiovascular events

Albuminuria in patients with young onset type 2 diabetes

Fethia Hamdi, Elhbil.

Objectives: To assess the profile at admission and the evolution in a cohort of young patients presenting T2D and to study the influence of glycemic control on progression of albuminuria. **Methods:** This is a prospective study. The Ethics Committee of Morocco's Mohammed V University in Rabat approved the study protocol. Inclusion criteria targeted patients who had T2D diagnosed before the age of 40 years and had been regularly followed in nephrology consultation for at least 36 months. **Results:** 121 patients met the inclusion criteria. Mean age at diabetes diagnosis was 36 < 60 ml/min/m2. At the end of follow-up, 27.3% were hypertensive, 24% had controlled diabetes, 27.3% had negative albuminuria, 17.4% showed rapid renal progression and cardiovascular events occurred in 12.4% of cases. **Conclusion:** Control of blood pressure, glycemia and albuminuria remain difficult to achieve in adults with YOD type 2, thus exacerbating the renal and cardiovascular disease risk. **Keywords:** Type 2 Diabetes, Young patients, Albuminuria

The influence of sex on progression of renal involvement and blood pressure control in type 2 diabetes

Meriem El Hebil, Fathia Hamdi

Objective: To evaluate the influence of sex on the progression of renal involvement and blood pressure control in type 2 diabetes. **Material and methods:** Prospective study including all DT2 patients with a one-year nephrological follow-up. Two groups of patients were distinguished : Group 1: male patients and group 2 female patients. Clinical and biological data were collected at admission and after one year of follow-up. **Results:** 499 patients were collected. 308 females and 191 males 39.6% of women had diabetic retinopathy versus 44% of men ,and 45.9% had diabetic neuropathy versus 42.4%. In our study, we found better results in women than men in achieving the goals recommended by international guidelines for blood pressure, blood glucose and dyslipidemia. Few studies have been carried out on this subject. **Conclusion:** Gender, one of the main factors influencing the patient's adherence to treatment, and therefore the achievement of recommended goals, is still controversial.

Hyponatremia profile in The Intensive Care Unit of University Hospital Center (Cameroon)

Simeni Njonou Sylvain Raoul, Bonaventure Jemea, Sylvie Ndonga

Faculty of Medicine and Biomedical Sciences

Objectives: The aim of this study was to describe the clinical, paraclinical and evolutive characteristics of patients admitted in Intensive Care Unit (ICU) in University Hospital Center and presenting a hyponatremia. **Methods:** We reviewed medical records of patients admitted in the ICU of University Hospital Center in Cameroon from January to December 2016. We included files of patients with hyponatremia (Natremia <135 mmol/l). Incomplete and missing files were excluded. We collected sociodemographics, clinical, paraclinical and evolutive data. Hyponatremia was classified in slight (<135-130 mmol/l), moderate (<130-125 mmol/l), severe (<125 mmol/l). Data had been analysed with Epi Info 7 and SPSS19. **Results:** On the 287 patients admitted, 25 (52 % of men) presented hyponatremia during this period with a prevalence of 8,1 %. Mean age was 49,60 ±17,09 years. Mean Natremia was 129,56 ± 4,2 mmol/l. An altered consciousness status (GCS<15) was found in 52 % of patients. Infectious lung diseases and Cerebral disease (vascular and infectious) were found in 64 %. Hyponatremia was slight in 56 %, moderate in 32 % and severe in 12%. Dyskaliemia were the most frequent electrolytic anomaly associated (40 %). Raised serum creatinin was found in 52 % of patients. The mean duration of admission was 7,80 ± 5,7 days. Mortality rate reached 68 % and was associated to hyperkaliemia, High systolic and diastolic blood pressure (p<0,001). **Conclusion:** Hyponatremia in ICU is associated to high mortality rate. **Key words :** hyponatremia, Kidney failure, ICU, Yaounde.

High blood pressure among the personnel of the university hospital of borgou (benin): prevalence and factors associated

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Objective: This survey aims to study was the prevalence and risk factors associated with high blood pressure among the personnel of the University Hospital of Borgou in Benin during 2013. **Methods:** this study was a cross sectional, descriptive and analytical held for three months (July 1st to September 30th, 2013) . Among the personnel of the University Hospital of Borgou, 373 people were involved, at the age in between 18 and 64 years. The socio-demographic and clinical variables are experimented. A questionnaire is designed for data collection. Data are analyzed by Epi-Info means with 5% of significance level. **Results:** A total of 373 subjects were enrolled in the University Hospital of Borgou. The mean age of subjects was 37 ± 9 years. The sex ratio was 0.86. The prevalence of subjects with HBP was 27.10%. The prevalence of those knowing that they were suffering from High Blood Pressure was 10.20%. The high blood pressure was significantly associated with the age ($p = 0.0124$), the marital situation ($p = 0.0016$), the duration in the job ($p = 0.0008$), the tobacco addiction ($p = 0.03$) , being diabetic ($p = 0.000$), the obesity ($p = 0.008$) and the antecedent family of high blood pressure ($p = 0.020$). **Conclusion:** The prevalence of high blood pressure is higher among the personnel of the University Hospital of Borgou, and the risk factors are important. Better prevention of risk factors contribute to reduce morbidity and mortality due to cardiovascular disease. **Keywords:** high blood pressure, prevalence, risk factors, personnel, University Hospital of Borgou

Prevalence of diabetic nephropathy and associated factors in type 2 diabetics in Cotonou in 2016

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Objectives: To determine the prevalence of diabetic nephropathy and to identify the factors associated with its occurrence in type 2 diabetics in Cotonou in 2016. **Methods :** This is a cross-sectional, descriptive and analytical study carried out in the centers for the management of diabetes in Cotonou from 03 October to 1 December 2016. All type 2 diabetics, aged 18 years and over followed in the centers in Cotonou were included. Diabetic nephropathy was defined by the combination of 3 criteria: previous diabetic or newly diagnosed diabetes, presence of microalbuminuria superior 30mg / 24h or proteinuria greater than 300mg / 24h and diabetic retinopathy. Associated factors such as socio-demographic characteristics, antecedents and complications were sought by logistic regression in univariate analysis. The data were entered and analyzed in Epi Info. The threshold of significance $p < 0.001$, creatinine clearance (MDRD) $< 60 \text{ ml / min / } 1.73 \text{ m}^2$ ($p = 0.027$), peripheral neuropathy ($p = 0.010$), total cholesterol ($p < 0.028$) and diabetic dysautonomia ($p = 0.007$) were the factors associated with the occurrence of diabetic nephropathy. **Conclusion:** It is important to provide to type 2 diabetics an integrated management that takes into account all risk factors. **Key-words :** Associated factor ; Benin ; Diabetic nephropathy ; Prevalence ; Type 2 diabetic patients.

Prevalence of Significant Renal Impairment and Proteinuria in a Group of Workers: A Cross-Sectional Study in a Sub-Saharan African (SSA)

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Objective: to determine the prevalence of significant renal impairment and proteinuria in a group of workers.

Methodology: Between October and November 2016, we carried out a cross-sectional study on adults ≥ 18 years of both sexes. We used the WHO STEPwise approach for the epidemiological surveillance of chronic non-communicable diseases. In STEPs three, we assessed the serum creatinine, calcium, phosphorous, and hemoglobin levels. Urine samples were assessed for proteinuria with dipstick. We estimated the glomerular filtration rate (eGFR) using the Cockcroft, CKD-EPI, and MDRD equations. Significant renal impairment was an eGFR < 60 ml/min. Risk of CKD was defined as significant renal impairment and or proteinuria. **Results:** A total of 236 participants were screened for risks of CKD. There were 137 (58.1%, [95% CI: 51.5 – 64.4]) males. Their mean age was 45.5 ± 10.6 years, and ranged from 23 to 62 years. The mean eGFR was 111.9 ± 30.3 ml/min using Cockcroft, 105.3 ± 25.9 ml/min using MDRD, and 102.04 ± 21.3 ml/min using CKD-EPI. The mean of the differences of eGFR between the formulae was statistically significant (all $p < 0.001$). Low eGFR was seen in 6 (2.5%, [CI: 0.9 – 5.5]) of the participants using CKD-EPI and MDRD equations, and 4 (1.7%, [CI: 0.5 – 4.3]) using Cockcroft equation. Five with low eGFR (83.3%) had very high 10-Year risk of and event. Proteinuria was seen in 5 (2.1%, [CI: 0.7 – 4.9]). Two of them (40%) had low eGFR and 4 (80%) had high to very high 10-Year risk. Combined low eGFR and or proteinuria was seen in 9 (3.81%) of the workers. **Conclusion:** Risk of CKD was non-negligible in this group of workers. Those with significantly low eGFR and or proteinuria had a very high 10-year cardiovascular risk suggesting an established CKD. eGFR significantly vary with the equation used in this population. **Key words:** Prevalence, CKD, cardiovascular risk, Cameroon, Africa.

Prevalence and Correlates of Hyperuricemia in Cameroon: A Cross-Sectional Study in a Sub-Saharan African (SSA) Setting.

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Objective: To determine the prevalence and correlates of hyperuricemia in Cameroon. **Methodology:** Between October and November 2016, we carried out a cross-sectional study on adults ≥ 18 years of both sexes. We used the WHO STEPwise approach for the epidemiological surveillance of chronic non-communicable diseases. In STEPs three, we assessed the serum uric acid levels. **Results:** A total of 236 participants were screened for hyperuricemia and other cardiovascular risk factors. There were 137 (58.1%, [95% CI: 51.5 – 64.4]) males. Their mean age was 45.5 ± 10.6 years, and ranged from 23 to 62 years. Hyperuricemia was seen in 66 (28%, [95% CI: 22 – 34.2]) of the participants. After multivariate analysis, hyperuricemia was associated with male sex (aOR: 1.92 [CI: 1.03 – 3.6], $p=0.036$), Age ≥ 50 years (aOR: 2.35 [CI: 1.32 – 4.2], $p=0.003$), Obesity (aOR: 3.63 [CI: 1.9 – 8.4], $p=0.001$), SBP ≥ 140 mmHg (aOR: 2.37 [CI: 1.03 – 4.5], $p=0.038$), DBP ≥ 90 mmHg (aOR: 2.26 [CI: 1.12 – 4.6], $p=0.021$), and Metabolic syndrome (aOR: 3.34, [CI: 1.7 – 6.6], $p<0.001$). **Conclusion:** Hyperuricemia was frequent in this group of people, and this was associated with male sex, age, and some components of the metabolic syndrome such as obesity and hypertension. **Key words:** Prevalence, Hyperuricemia, cardiovascular risk, Cameroon, Africa.

Challenges of training renal personnel in africa: the role of profesional africansin diaspora

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In today's globalised world, Africans have travelled to the developed world through brain drain or through the problems that they find at home whether as economic or political/social immigrants. In the process of this they have gained, made friends internationally, acquired skills and knowledge in their host developed world. Today they are willing and looking to transfer their skills back home in the name of 'giving back to the community.' The story of this success is more real in India. A large Indian diaspora went home and re-inventing their healthcare and other technological knowledge. Kidney Research Kenya is born out of patients, doctors and nurses who are passionate about retelling the story of the renal patient in the African continent. Through the partnership that they have with the international organisations such as IFKF, EKHA, several Universities in Europe including Kings College London, Liverpool University, Royal London, Toledo University in the USA and Cairo University in Egypt they have been able to complement what the Kenya Government is doing in the devolved counties by training doctors, nurses and other renal specialists abroad. They have set up dialysis centres or helped to establish some in conjunction with existing healthcare providers. As a voice of the patients in Kenya the organisation has successfully worked with other charities – including FIGO Foundation under Dr Were to campaign for free dialysis and kidney transplantation. At the moment the organisation is working with the government to establish six centres of excellence in kidney health including kidney transplantation. With 5 renal specialist trained through their programme and others in training, running dialysis centres, and facilitating training programmes to Kenya Government pilot project set up in Kiambu County near Nairobi, Kidney Research Kenya believes that their project can be duplicated all over Africa. The African Diaspora can and will play a major role in finding a lasting solution to the renal health problem in Africa.

Trends in the prevalence of chronic kidney disease and its risk factors in Kinshasa over 10 years

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Objectives: To assess whether the prevalence of chronic kidney disease (CKD) and its risk factors changed over time (10 years) in general population of Kinshasa, the Democratic Republic of Congo. **Methods:** We performed two repeated cross-sectional surveys of residents aged > 18 years in 2006 (500 subjects using recalibrated serum creatinine results with Jaffe method against IDMS enzymatic method) and 2015 (2504 subjects using serum creatinine calibrated IDMS enzymatic method) in Kinshasa/ DRC. We compared the prevalence of CKD (one or both of proteinuria and estimated glomerular filtration rate (eGFR) < 60 mL/min/1.73 m²) using the four-variable Modification of Diet in Renal Disease (MDRD) study and Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) estimators of eGFR) and potential risk factors among both surveys. **Results:** The average age of the whole population in 2015 was higher (46.2 ± 17.1 years) than in 2006 (38.6 ± 14.4 years) p <0.001, IC 95%. The prevalence of CKD (all stages) using CKD-EPI remains stable (10.6% vs. 9.4%, P= 0.22), while the prevalence according to MDRD decreased significantly over time (12.4% in 2006 versus 9.1% in 2015, P = 0.016). However, awareness of CKD is low and stable (0.4% vs. 0.6%, P=0.82). At the same time, CKD stages 3-5 according to CKD-EPI remained stable (4.4% vs 4%, P=0.37), whereas CKD Stages 3-5 (eGFR < 60mL/min/1.73m² MDRD) appears to decrease with time (6.4% vs 3.7 %, P= 0.006). The frequency of potential risk factors of CKD shows variable evolution over one decade: increase for hypertension (27.6% vs. 43%, P<0.0001) and stability for obesity (14.8 % vs. 17.7 %, P=0.131) and decrease for diabetes (11.7% vs. 5.6%, P<0.001). **Conclusions:** The evolution of prevalence of main risk factors of CKD is variable over this decade. The awareness of CKD remains very low. The prevalence of CKD is relatively stable when using CKD-EPI formula, but is decreasing when using the MDRD one. Such discrepancy emphasizes the need for new validated formulas for the Congolese population. **Keywords:** CKD, prevalence, trend, MDRD, CKDEPI, Kinshasa, DR Congo.

Epidemiology and outcomes of patients on renal replacement therapy in Cape Verde: a 2015 and 2016 audit

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Objective: To describe the epidemiology and outcomes of end stage renal disease in Cape Verde. **Method:** We analyzed data of all patients with end-stage renal disease admitted for renal replacement therapy in 2015 and 2016 at the unique center with renal replacement therapy facilities in Cape Verde (Centro de Diálise, Hospital Dr. Agostinho Neto, and Praia). The center offers only haemodialysis. Outcomes of interest were prevalence of arteriovenous fistulas, proportion with target hemoglobin, and mortality. There is neither a peritoneal dialysis nor transplantation program in the country. The State funds all aspects of haemodialysis including recombinant erythropoietin. The cost of treatment represents 7% of general state budget. **Results:** In 2015, 70 patients were treated giving a prevalence of 127.6 pmp. The median age was 56 years and 59% were males. HIV infection was present in 4%, Hepatitis B in 4%, and Hepatitis C in 1%. The principal cause of chronic renal disease was Diabetes (31%). The prevalence of arteriovenous fistulae was 34% and 74% had a mean Hemoglobin (Hb) level > 10g/dl. The mortality rate was 12%. In 2016 the number of patients increased to 109 thus a prevalence of 207 pmp with a similar proportion of males (56%). There was no significant difference in the median age of patients and the prevalence of HIV, Hepatitis B and C. However, the prevalence of arterio-venous fistulas increased to 62%, while only 37% had a Hb level>10g/dl due to an increase in demand of the limited resources for recombinant erythropoietin. Mortality rate was stable at 13%. **Conclusion:** There is growing burden of end-stage renal disease in Cape Verde which may likely overwhelm the state budget. The putting in place of a comprehensive CKD program which includes prevention may reduce the burden. **Key words:** epidemiology, renal replacement therapy, end-stage renal disease, Cape Verde.

The profile of patients seen at the nephrology out-patient clinic of the Yaounde general hospital in Cameroon

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Objectives: To describe the profile of patients seen in a specialized nephrology out-patient clinic in Yaounde, Cameroon. **Methodology:** We retrospectively reviewed the medical files of all patients who consulted in the nephrology out-patient clinic of the Yaounde General Hospital from January 1 to December 31st 2014. We included all incident patients during the period under study. Variables of interest included chief complaint, reason for nephrology referral, source of referral and final diagnosis. **Results:** We enrolled a total of 199 patients (117 men) who met our inclusion criteria. Their mean age was 49,25±19,3 years. Hypertension (52,3%), diabetes mellitus (19,6%), and HIV (10,6%) were the most frequent comorbid conditions. More than 50% of participants were extra-mural referrals (87.9%). They were referred by a general practitioner (32.7%), a cardiologist (19.1%), and nurses (8.0%); 17.1% came themselves. The main reasons for referral/chief complaints were raised serum creatinine (51.7%), lumbar pain (9%), renal cyst (4%) and lower limb edema (4%). Renal disease was confirmed in 82,9% of the participants. Chronic kidney disease (29.6%), acute kidney injury (22.6%) and nephrotic syndrome (12.6%) were the most frequent renal diagnosis. Urologic pathologies (6.5%) and rheumatologic pathologies (5.5%) were the most frequent non-renal pathologies. **Conclusion:** Patients seeking nephrologist consultation in Yaounde are mainly young middle aged males with raised serum creatinine referred by a general practitioner, cardiologist, nurse or come themselves for raised creatinine levels or lumbar pain. The frequency of non-renal referrals to the nephrologists may suggest knowledge gaps concerning renal pathologies manifestations. **Key words:** patient profile, nephrology consultation, Yaounde General Hospital

Plasmapheresis Therapy in Nephrology: Algerian Experience

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Objective: to determine the position of PET in Nephrology, to precise the main indications used for and to analyze results and its efficacy. **Methods:** We performed a retrospective study carried out between 2010 and 2016 including 198 patients recruited in our Nephrology Department with an average age of 40 years [Ranges 09-71years]. For non selective plasmapheresis by filtration, we used a Fresenius Multifiltrate monitor with plasma filter flux and as replacement solutions human serum albumin or fresh frozen plasma. The number of sessions depends on indications and the response to PET. Hemodialysis (HD) completed PET when necessary with the introduction of an immunosuppressive treatment. **Results:** The study included 198 patients: 132 (66.6%) patients out of 198 were managed for Nephrological indications (Crescentic glomerulonephritis 84 patients, Systemic lupus erythematosus 45 patients, vasculitis associated ANCA 17 patients, Goodpasture's Syndrome 14 patients, Crescentic Ig A Nephropathy 05 patients, 03 patients for Rheumatoid purpura) and for kidney transplantation indications (29 patients for humoral rejection and recurrence of nephropathy). 66 (33.3%) patients for Neurological, hematologic and other indications. Concerning the response to PET: the results were spectacular for neurological impairment. For renal involvement an improvement in renal function was observed in 42 patients with stopping HD for 21 patients and still only 20 patients in chronic HD. **Conclusion:** As illustrated in this study, we noticed that PET occupies an important place in our Nephrology department not only as a healing treatment but also as a rescue treatment.

The Spectrum of biopsy-proven renal disease in Cameroun

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Objectives: To describe the spectrum of biopsy-proven renal disease in Cameroon. **Methods:** This was a retrospective analysis of renal biopsy reports of patients who were biopsied between 2006 and 2016. We excluded biopsies of patient with incomplete relevant information (age, sex, biopsy indication). Indications for renal biopsy and results were noted. Biopsies were interpreted by various renal pathologists in Europe and Africa due to lack of this service locally. No electronic microscopy and immunofluorescence was performed. **Results:** Overall 138 patients were performed but complete data was available only for 93 who were included in the study. Males accounted for 62% and the mean age of participants was 35.37±14.98 years. The main indications for renal biopsy were: nephrotic syndrome (63.4%), acute kidney injury (20.4%) and acute nephritic syndrome (10.7%). Primary glomerulonephritis accounted for 87.1% (n=81) of nephrotic syndrome and included focal and segmental glomerulosclerosis (FSGS) (30.9%), minimal change disease (16%), mesangioproliferative GN (7.4%) and membranous nephropathy (3.7%). Lupus nephritis was the most frequent secondary glomerular disease with 7 cases (class III=1, class IV=4, class V only=1, class IV+V=1). Acute-interstitial nephritis (n=6), acute tubular necrosis (n=4) and malignant nephroangiosclerosis (n=4) were the main findings in participants with acute kidney injury. Only 2 of the 6 HIV positive patients had HIV- associated nephropathy. **Conclusion:** Nephrotic syndrome constitutes the main indication for renal biopsy with FSGS as the main glomerular lesion observed in our practice. **Key words:** renal biopsy, indications, findings, Cameroon.

Epidemiological Profile of Chronic Kidney Disease at the General Hospital of National Reference of N'Djamena (Chad)

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Objective: to determine the prevalence of CKD. **Methods:** This was a retrospective, descriptive and analytical study over a period of 12 months from April 29, 2011 to April 28, 2012. All patients with chronic renal failure regardless of etiology and stage of chronic kidney disease were included in the study. Chronic renal failure was defined as a glomerular filtration rate below 60 ml/min/1.73m (MDRD) for more than 3 months. This study was conducted in several departments of the National General Reference Hospital (NGRH) of N'Djamena. **Results:** Among 2039 inpatients, 195 patients had chronic renal failure, as a frequency of 9.6%. The average age of our patients was 51 ± 16.8 years, ranging from 11 to 85 years. Male predominance was noted to be 59% of men against 41% of women. We noted that high blood pressure accounted for 66.2% (N = 129) of cases, diabetes in 48.2% (N = 94), alcoholism in 28.7% (N = 56), smoking in 14.9% (N = 29) and the association alcoholism-smoking in 19.5% (N = 38). Hypertension was the leading cause of chronic renal failure (66.2%). All patients had a serum creatinine and creatinine clearance was assessed. Among them, we noted 57 patients (29%) with end-stage renal failure. The average calcium and phosphate serum were 1.8 mmol/l and 1.6 mmol/l, respectively. We noted that 120 patients as 61.5%, currently took herbal medicine. 48 out of 57 of our patients with ESRD as 24.6% of patients in the study had received replacement therapy (haemodialysis) with 12.5% of deaths. **Conclusion:** In Chad, you compiled the first study with 195 patients at the General Hospital of N'Djamena National Reference, over a period of one year and objectified a prevalence of chronic renal failure of 9.6%. **Key words:** Chronic Kidney Disease, Epidemiology, N'djamena, Chad

Autosomal dominant polycystic kidney disease (ADPKD) in Mauritania

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Objective: To give the epidemiological profile of patients with Autosomal dominant polycystic kidney disease **Methods:** This was a 3 years observational, retrospective study of medical records of patients followed in the nephrology- hemodialysis department in CHN. The study period was from January 1st 2010 to December 31 2012. The diagnosis of ADPKD was based on clinical and ultrasonographic criteria of Ravine. The epidemiologic, clinical, complementary and evolutionary data has been collected from the patients' medical records. **Results:** During the study's 3 years, 2164 patients have been admitted to the department, 64 were diagnosed with ADPKD (prevalence= 2.9%, incidence= 21 new cases per year). The average age of patients was 49.42 ± 15 years with a sex ratio of 1.06. The main clinical signs were arterial hypertension (50%) and loins pain (31.25%). The main extra-renal localization of cysts was the liver (21.8 %). The mean blood creatinine was 50 mg/l (extremities: 7 - 153 mg/l). All patients have benefited from a genetic counseling. No genetic mutation has been identified due to the lack of necessary diagnostic tools. The arterial hypertension has been treated by a mono (13 cases), bi (12 cases) or tritherapy (7 cases). In our series 22 patients have maintained normal renal function tests. 42 patients (65%) with an average age of six years have evolved to a renal failure, 33 of them (78%) were at the stage 5 of CKD. 6 patients have deceased due to chronic uremia: 3 men and 3 women. The other complications found were : intracerebral hemorrhage (1 case), gross hematuria in 5 cases (7.81%) ; urinary infection to Escherichia Coli in 6 cases, to Staphylococcus aureus in 1 case, to Klebsiella pneumoniae in 1 cas. An intracystic infection was found in one case (demonstrated by an image of spontaneously hyperdense cysts on abdominal CT scan). **Conclusion:** Similarly to the situation in other countries, ADPKD is the most common hereditary kidney disease in Mauritania. More frequent family screening and more early strategy of kidney protection must allow an improvement in patients prognosis. **Key words:** Polycystic kidney disease, renal failure, Mauritania.

Hepatitis C prevalence in chronic haemodialysis patients in the Centre Hospitalier National (CHN) of Nouakchott

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Objective: to determine the prevalence of hepatitis C in patients following a chronic haemodialysis replacement therapy in the CHN haemodialysis unit. **Methods:** This was an observational, descriptive, cross-sectional study of thirteen months duration which lasted from December 1st 2014 to January 5th 2016 in the haemodialysis unit of CHN. Were included all patients who have been regularly on haemodialysis for more than three months. HCV was identified using a serologic method. **Results:** During the study period, 128 chronic haemodialysis patients were included. The average age patients was of 48 ± 14.41 years with an interval extremities between 21 and 75 years. The sex ratio was of 0.43. The mean duration on hemodialysis was of 4 years. The initial causative nephropathy was Nephroangiosclerosis in 40% of cases and diabetic nephropathy in 19% of cases. 33 patients were repeatedly transfused. The mean transfused quantity was of 5 blood sacs. 8 patients were diagnosed with HCV infection (prevalence= 6.25%). A hepatic cytolysis was found in 48% of patients. An active HCV replication was found in 6 patients with a mean RNA concentration of 213194 UI/ml. 2 patients were co-infected by HBV Hemodialysis is considered a risk factor for HCV infection. Prevalence varies from hospital to another. In our study the prevalence was of 6.25%. In Africa, the prevalence varies from a country to another: 19.3% in Senegal, 20% in Tunisia and 68.3% in Morocco. The risk factors found in our survey were: repeated blood transfusions and long duration on haemodialysis. **Conclusion:** HCV infection remains common in the haemodialysis setting. In order to reduce the prevalence: blood transfusion should be avoided by the use of erythropoietin and rigorous asepsis protocols should be implemented.

Evaluation of the nutritional status of chronic haemodialysis patients in the Centre Hospitalier National of Nouakchott (Mauritania)

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Objectives: to assess the nutritional status of chronic haemodialysis patients in Nouakchott and to determine the prevalence and prediction factors of malnutrition among this population. **Results:** Sixty nine chronic haemodialysis patients were included. The average age was 45.9 ± 14.08 years. The sex-ratio was 0.97. The mean duration on hemodialysis was 27 months and 20 days. Anorexia was found in 59.4% of patients. The mean BMI was 24.38 ± 3.74 kg/m². The mean arm circumference was 22.91 ± 3.6 cm. The mean albuminemia was 38.69 g/L, L [interval extremities are 19.2 and 48.4 g/L]. A non-specific biologic inflammatory response syndrome was found in 16.17% of patients. The mean blood hemoglobin was 8.3 ± 0.9 g/dL. Malnutrition prevalence was 36.2%. This malnutrition was moderate in 20.3% of cases and severe in 15.9% of cases. It was attributed to a low social and economic level ($p=0.026$), to anorexia ($p=0.006$), to a deteriorated dental status ($p<0.001$), to a low BMI ($p<0.001$), to a low arm circumference ($p<0.001$), to hypoalbuminemia ($p<0.001$), to hypophosphatemia ($p = 0.039$), to hypocholesterolemia ($p < 0.001$), to an increased CRP ($p < 0.001$) and to hypoproteinemia ($p=0.003$). The malnutrition prevalence in our survey was similar to that found in literature using the same method SGA of DETSKY. The nutritional status of haemodialysis patients must be regularly evaluated especially in resource-limited countries like ours. **Conclusion:** The prevention of malnutrition via dietary measures should be in the center of chronic haemodialysis patients care.

Renal function abnormalities in individuals with the sickle cell trait

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Objective: To compare the prevalence of renal function abnormalities in individuals with the sickle cell trait to those with normal adult hemoglobin phenotype. **Methodology:** This was a comparative cross sectional study carried out at the hemato-oncology unit of the Yaounde Central Hospital and the sickle cell unit of the mother and child centre of the Chantal Biya Foundation. The study ran for a period of 4 months. Included in our study were all consenting individuals aged between 10 to 60 years with SCT or adult hemoglobin phenotype. We excluded individuals who were diabetic, pregnant, on drugs which can color urine, had uncontrolled hypertension or on drugs that reduce proteinuria. Each participant was examined and blood samples collected for various analyses which included the serum creatinine assay, full blood count, Hepatitis B antigen, Hepatitis C antibody, and HIV serology. Random urine samples were also collected and urine dipsticks done at the spot. The estimated glomerular Filtration rate was calculated using the CKD EPI formula for Adults and the Quadratic formula for children. Data analysis was performed using SPSS version 20 and Epi-Info version 7.1.0.6. **Results:** A total of 400 (288 females) individuals were included, 200 AS and 200 AA. The groups were comparable for age, sex and comorbidities. The mean age \pm SD was 36.4 ± 11.2 for the AS group and 36.1 ± 11 for the AA group. In total, 10.5% (n=21) in the AS group compared to 2.5 % (n=5) in the AA group had renal function abnormalities (p=0.001). Hematuria (6% in AS vs. 0% in AA; p=0.01), proteinuria (1.5% in AS vs. 2.5% in AA; p=0.7) and leucocyturia (1% vs. 0%; p= 0.2) were the urinary abnormalities observed. There were significantly more participants with an eGFR<60ml/min/1.73m² in the AS group (6 versus 0. P=0.01). A level of hemoglobin <13g/dl was the only factor independently associated with renal function abnormalities in individuals with the sickle cell trait (OR= 3.7, 95% CI (1.1 – 12.3)). **Conclusion:** Renal function abnormalities are more prevalent in individuals with the sickle cell trait than those with the adult hemoglobin phenotype.

Diabetic nephropathy in Ibn Sina University Hospital: epidemiology and renal outcomes after one year of nephrological management

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Objective: To determine the risk factors (FDR) associated with chronic renal insufficiency in type 2 diabetic and to assess the evolution of this chronic renal Failure (CRF) after nephrological management. **Methods:** our observational study covers a period of 15 years (2000-2014) including all type 2 diabetic patients with diabetic nephropathy followed up in the nephrology consultation at Ibn Sina University Hospital in Rabat. We divided these patients into 2 groups: with and without CRF. We analyzed the different clinical, biological and evolutionary parameters of the patients before the introduction of nephroprotection measures and after one year of follow-up. **Results:** Of the 1396 patients in our study, 890 were in the CRF stage (63.7%), while 506 patients had diabetic nephropathy without CRF (36.3%). The average age of our patients was 62.22 ± 11 years. The sex ratio was 1.25. At admission, diabetes was uncontrolled in 56.6% of patients. Only advanced age, male sex, anemia and hyperuricemia were considered to be associated factors for CRF in multivariate analysis. After nephrological management and one year follow-up, there was a significant decrease in urinary albumin excretion in both groups and stabilization of renal insufficiency with a decline of 1.6 ml / min / year in the group with CRF. **Conclusion:** Early detection of DN with multidisciplinary management would improve the prognosis by slowing the progression of diabetic nephropathy as much as possible.

Incidence, characteristics and prognosis of acute kidney injury in Cameroon: a prospective study at the Douala general hospital

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Objective: Determine the incidence, characteristics, and prognosis of acute kidney injury (AKI) in Cameroon.

Patients and Methods: We conducted a prospective study including all consenting acute admissions in the internal medicine and the ICU of the Douala General Hospital, in Cameroon from January 2015 to June 2016. Serum creatinine assay was done on admission, days 2, and 7 to diagnose AKI. For patients with AKI, serum creatinine was done on discharge, day 30, 60 and 90. AKI was defined according to the modified KDIGO 2012 criteria. AKI severity was graded using KDIGO 2012 criteria. Outcome measures were: need and access to dialysis, renal recovery, mortality, causes of death within 3 months. **Results:** A total of 2402 patients were included, and 536 (129 in ICU, 407 in internal medicine), thus a global incidence of 15 per 100 person – years. Of the 536 patients with AKI 54.9% were males and the median age was 56 years (14-95). AKI was community-acquired in 93.3% and 43.3% had AKI stage 3. Pre-renal AKI (61.6%) mainly due to sepsis (55.8%) and acute tubular necrosis (29.1%) from sepsis (49.5%), and nephrotoxins (14.7%) were the most frequent forms. Dialysis was indicated in 54 patients, but was not done in 15 patients due to lack of adequate materials. Renal outcome was unknown in 34% (182/536) of patients. Renal recovery was complete in 57% (354/536), partial in 9.7% (52/536) and 4 patients progressed to CKD. Mortality rate was 37.5% (201/536) and factors associated to mortality were: vaso-active drug use (aOR=4.14, p=0.014); mechanical ventilation (aOR=13.86, p<0.0001) and presence of malignancy (aOR=3.86, p=0.003). **Conclusion:** AKI is frequent, mainly community-acquired from infections and hypovolemia and carries a grave prognosis. **Key words:** Acute kidney injury, Incidence, Prognosis, Douala, Cameroon

Innovative adaptations for acute peritoneal dialysis at the Mbingo Baptist hospital, Cameroon

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Objective: To provide PD for Acute Kidney Injury (AKI), starting in May, 2013, to allow recovery of renal function in 1 month, or referral for haemodialysis. **Methods:** Standard CAPD technique, using a double-cuffed Tenckhoff catheter, exchange volumes up to 2L, 4 exchanges/day. Supplies initially provided through a grant from RRI & Fresenius. After 2 years, PD solutions were locally made, and some equipment adapted from local supplies. **Results:** During 3 ½ years, 69 patients (pts) have undergone PD (20 pts - first year, 7 the second, 27 the third, and 13 - next 6 months.) Age: ranged from 5 months to 76 years. Ages 1-10 years n=14; 11-20 n=19; 21-30 n=14; 31-40 n=12; >40 n=10. Females, 52% and males, 48%. Diagnoses for AKI: Unknown (15 pts), CKD (10), infection (22 of which malaria =12 and HIV= 5), other renal (6), hypertension (3), heart failure (3), toxins (3), other (7). Length of Stay: Mean: 14.1 days (+12.9 SD) and median, 12 days. Thirteen patients had peritonitis (18.8%). Number of exchanges: Mean: 52.5 exchanges (+ 45.9 SD) and median, 35. Labs: Admission (adm) serum creatinine (mg/dl): Mean: 13.8 (+ 8.7). Discharge creatinine: Mean 6.3 (+ 4.3). Adm BUN (mg/dl): 255.85 (+ 139.8), and discharge BUN: 105.9 (+ 69.1). Adm serum K: 5.3 mmol/L (+ 1.5), and discharge K: 4.3 (+1.2). **Outcomes:** 47 pts (73%) have survived, 31 patients (48%) off dialysis, and 16 (25%) referred for haemodialysis; 17 pts (27%) died. With the need for a sustainable PD program with limited resources, PD solutions were locally made early in 2015. The PD fluid: Lactated Ringer's, with addition of 50% dextrose to provide 1.45% and 2.5 % PD fluids. For PD connectology, I-V infusion tubing is used, connected by a 3 way stopcock to the PD catheter tubing and by a segment of suction tubing to a sterile urine bag (used for PD drainage). Flush before fill technique is used. Residents have been successfully educated in PD and are writing PD orders, with supervision. **Conclusions:** Acute PD has provided survival for three-quarters of patients with AKI over the past 3 ½ years. The innovative adaptations may be useful in expanding PD for AKI to other areas with limited resources. Internal Medicine residents can successfully write PD orders for AKI.

Performance of Medi test Combi 9 in the diagnosis of haemoglobinuria compared to the quantitative measure using the reagent 3,3'-dimethylbenzidine

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Objectives: This study aimed to evaluate the performance of 3 dip stick among the frequently used into diagnosis of haemoglobinuria in children suffering blackwater fever. **Patients and methods:** In a case-control study, 129 patients (43 inpatients having dark urine versus 86 outpatients with clear urine) were screened for haemoglobinuria. A spot urine sample from each subject was tested both by a dipstick (Medi Test Combi 9, as well 9 and 10 parameters Cypress) and a spectrophotometric method using 3, 3' dimethylbenzidine reagent. The performance of dipstick haemoglobinuria exceeding (1+) was compared with that of quantitative measurement of haemoglobinuria using the reagent 3,3'-dimethylbenzidine. **Results:** The prevalence of dipstick hemoglobinuria in the 43 hemoglobinuria cases (1+); (2+), (3+) was 27%, 18% and 53% respectively compared to spectrophotometer quantification detection which was 0.061 ± 0.0166 mg/L, 0.3986 ± 0.2612 mg/L and 0.5679 ± 0.27688 mg/L respectively. Compared to the quantitative method, the sensibility was 100%, for Medi test combi9, 93% for both parameter 9 and 10 of cypress diagnosis. Specificity and positive predictor value was 100%, for all the dip sticks. The negative predictor value was 100% for Medi test combi9 and 96.6 % for both parameter 9 and 10 of cypress diagnosis. **Conclusion:** Haemoglobinuria is easily and frequently detected by qualitative method, which demonstrates a good performance in comparison to the quantitative method. In the absence of quantitative method, dip stick hemoglobinuria should be used as an alternative method to detect hemoglobinuria in limited resource countries such as DR Congo. We recommend Medi test combi 9. **Keywords:** Dipstick haemoglobinuria - spectrophotometer quantification - Diagnosis value - black water patients.

Acute kidney injury in a department of internal medicine in Abidjan (Cote D'Ivoire): Epidemiology and prognosis risk factors.

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Objectives: To describe the epidemiological profile and prognostic risk factors during AKI. **Methods:** We analyzed the cohort of patients hospitalized for AKI in the period from January 2010 to December 2015 in department of nephrology and internal medicine of Treichville. AKI was defined and classified according to the K/DIGO recommendations. Demographic, clinical and biological variables analyzed by logistic regression have identified predictors factors of mortality and non-recovery of renal function. **Results:** We collected 414 cases of AKI during the study period. The mean age was 48.3 ± 16.8 years. We observed a male predominance with a sex ratio (236/178) of 1.32. The main causes of AKI were infections (48.2%), water loss (13.3%), benign tumors of the urinary tract (8.9%), drugs (8%), malignant hypertension (8%) and cancer (7.2%). Benign tumors of the urinary tract were found in 1% in patients <35 years, in 3.8% in patients between 35-64 years and in 14.8% in patients ≥ 65 years ($p < 0.001$). Drug AKI was observed in 15.5% in patients <35 years, in 6.4% in patients between 35-64 years and in 3.7% in patients ≥ 65 years ($p = 0.006$). The outcome was favorable in 61.8% and mortality of 38.2%. Factors such as age ≥ 65 years ($p = 0.004$), severe anemia ($p < 0.001$) and drugs ($p = 0.006$) were associated with mortality during AKI in our patients. Factors of non recovery of renal function were age ≥ 65 years ($p = 0.001$), Hypertension ($p < 0.001$), severe anemia ($p < 0.001$), malignant hypertension ($p = 0.016$), cancer ($p < 0.001$) and benign tumors of the urinary tract ($p = 0.038$). **Conclusion:** AKI occurs mostly in young adults. The etiologies are dominated by infections. The fatality is high and its risk factors are advanced age, severity of anemia and drug intake. **Keywords:** acute kidney injury, infection, malignant hypertension, urinary tract tumors, water loss.

Involvement of religious factors on the attitude toward organ donation among university students in Morocco

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Objective: This study sought to analyze the attitude of University students in Morocco regarding deceased organ donation depending on their religious beliefs. **Material and Methods:** A sample of university students from Marrakech (n =503) stratified by age and sex were selected. Data of this cross sectional study was collected by self administered and anonymous questionnaire from 4 universities in Marrakech . The chi-square test, Student t test, and logistic regression analysis were used to analyze data. **Results:** Of the 503 survey respondents, 40.3% were females, 40.3% were males. 99.4% (n =500) were Muslims , 0.6% (n =3) were Catholic. Mean age of the sample was 21.5 ± 1.7 . 100% of students answered the questionnaire. Majority of students (86.4%) were aware of organ donation in Morocco with media as the main source of information. 57.6% agreed to donate their organs. In the students' opinion, The most commonly donated organs and tissues were kidney and heart. 24.5% of the students thought that organ donation was performed only in Public hospitals. 33.4% were aware of organs that could be transplanted. A significant association between the religious beliefs and attitude toward organ donation among those tested can be objectified: 60.6% of respondents believed their religion was favorable toward donation and 39.4% consider their religion contrary to donation . Among the respondents who considered their religion contrary to donation , only 45.45% were in favor of cadaveric organ donation (P < .001). **Conclusions:** The attitude toward cadaveric organ donation among University students in Morocco are influenced by religious beliefs and consider what their religion says regarding organ donation.

In renal transplantation, does the anastomosis time really affect the early outcomes?

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Objectives: the aim of our study was to evaluate the relationship between anastomosis time and the delayed graft function, and determine how much does this parameter contributes to renal graft outcome. **Methods:** we performed a retrospective descriptive study, which resembled 77 renal transplant recipients from January 2010 to January 2015. We analyzed our patients' data to examine the association between anastomosis time and delayed graft function and length of hospital stay. **Results:** Delayed graft function (DGF) was observed in 23 patients (29,87%). The mean anastomosis time was 72.01 ± 20.75 minutes. Anastomosis time was independently associated with DGF. An anastomosis time >72.01 minutes was also associated with a 3.5 fold higher (OR 3.5, 95% CI 1.6, 7.3, P = 0.001) risk of DGF. Median days in hospital was 9 (interquartile range 7, 14 days). Every 5 minutes of longer anastomosis time (0.20 days per minute, 95% CI 0.13, 0.27, P 29 minutes was associated with 3.8 (95% CI 1.6, 6.0,P<0.001) more days in hospital. **Conclusion:** AT may be an underappreciated but modifiable variable in dictating use of hospital resources. There were significant increases in both need for dialysis and length of stay at this center with increased AT. Anastomosis time may be an underappreciated but modifiable variable in dictating use of hospital resources. The impact of anastomosis time on longer term outcomes deserves further study.

The impact of the seniority in dialysis on the evolution of the renal transplant

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Introduction: The kidney transplant represents the method of substitution of choice in the terminal chronic renal insufficiency. Its access which is not always easy seen the lack of alive or deathly donors leaves other options only the dialysis. **Purpose:** The purpose of this work is to determine the impact of duration in dialysis on the evolution of the renal function after the transplant, as well as on the possible infectious and surgical complications. **Materials And Methods:** It is about a descriptive, analytical study, monocentric and retrospective. All the renal transplanted patients from an alive donor been similar, between 2009 and 2015, were included. The demographic, clinical data and adorned private hospitals were collected from medical files. 2 groups were individualized according to a seniority in dialysis: Group A = 1an, Group B > 1an. **Results:** 68 patients were listed with: an average age of 31.5 ± 13.6 , a sex ratio H/F of 1.4 a seniority in hemodialysis around 37.3 ± 31.7 . The causal renal disease was indefinite in 47 % of the cases. The comparative study noted: the resumption delayed the transplant 4.5 % in group A vs 15.2 % to the group B, the infectious complications including viral infection: of 27.3 % (A) vs 28.2 % (B), the surgical complications: 22.7 % (A) vs 24 %, the renal function in 1an creatinine: 13.3 ± 14.7 (A) vs 14.6 ± 15.9 (B). The mortality which was nil in the group (A) vs 6.5 % (B). The study united varied raised no statistically significant difference. **Discussion:** The periodic hemodialysis, a fortiori when it is extended, exposes to cardiovascular, infectious complications or of the phosphocalcic metabolism, compromising of this fact the appeal to the kidney transplant in optimal conditions due to the calcifications of the axis aorto iliac or still the viral reactivations in particular hepatitis C. Our work did not raise significant differences as for the impact of the duration in hemodialysis, what could be connected with a way of selection of the balance sheet pretransplant, to eliminate every candidate presenting important comorbidity (important overload atheromatous, unstable coronary syndrome ..). **Conclusion:** The renal transplant when it is possible rest the way of substitution of choice allowing the patient to maintain a better quality of life than dialysis.

Anticalcineurines in renal graft from living donor: tacrolimus versus ciclosporin

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Objectives: The aim of our work was to compare the impact of anticalcineurines on the evolution of graft function, as well as on infectious and tumor complications. **Material And Methods:** It is a descriptive, analytical, retrospective and mono centric study carried out over a period of 7 years (2009 to 2015). All kidney transplanted patients from living related donor receiving triple therapy including anticalcineurines as immunosuppressive therapy were included. Minimum follow-up of 1 year was required. Group B: receiving tacrolimus. 2 groups were individualized: Group A: receiving ciclosporin. **Results:** We recorded a total of 68 patients, 39 patients in group A (57.4%) and 29 in group B (42.6%). In arm A: The mean age was 34.10 ± 12.9 years, The mean age of donors was 43.1 ± 11.4 years, mean creatinine nadir at 12.1 ± 9.2 mg / l and creatinine at one year at 12.6 mg / l. Group B had an average age of 28.1 ± 14.2 years, an average age of the donor at 45.3 ± 13.1 years, a creatinine nadir at 11.5 ± 5.9 mg / l and a creatinine at 1 year at 10 ± 4.5 mg / L. The analytical study found no statistically significant difference between the 2 groups as to: need for post-transplant hemodialysis, creatinine nadir, renal function at 1 year, rejection episodes, viral (cytomegalovirus) and tumor complications. **Discussion:** The use of tacrolimus in renal transplantation showed better results than ciclosporin in a meta-analysis of renal function and rejection episodes (1). Our results could be explained by the absence of protocol biopsies. **Conclusion:** In the light of this study, the use of anticalcineurins did not reveal the superiority of one class over the other. Further studies are needed to see their impact In the long term on the function of the graft.

Factors favoring the allocation of a renal graft

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Introduction: Access to the renal transplant from brain-dead donor (EME) is based on a waiting list according to a scoring validated at the national level. The aim of this work is to highlight the characteristics of all the patients on the waiting list of our structure, as well as to look for the factors favoring the allocation of the grafts. **Material And Methods:** Analytical, monocentric, retrospective. Inclusion criteria: Patients enrolled in the waiting list (renal transplant / EME) at the Ibn Rochd University Hospital in Casablanca: September 2010 - April 2015. Statistical analysis compared two groups of patients: transplant versus non-transplanted patients. **Results:** 76 patients were enrolled, of which 23.6% were transplanted after an average delay since enrollment of 738.16 days. 50% of patients were between 30 and 40 years of age. 50% had a higher level of education. The predominant blood group was A (43.5%) and anti-HLA antibodies (AC) were present in 61.8% of patients enrolled. The analytical study found favoring factors of attribution: not to be over 50 years old ($p = 0.02$), to have a higher education level ($p = 0.006$), to have a profession ($p = 0.023$), Not being of blood group A ($p = 0.03$) and absence of AC anti HLA ($p = 0.005$). **Discussion:** The waiting period is a major criterion of attribution and can alone make the difference. Yet, the longer the waiting period and the worse the results of the transplant. Some authors propose to account for this delay since the start of dialysis treatment. **Conclusion:** For the sake of fairness, the allocation process must be optimized perpetually. To overcome the shortage of grafts, we should promote organ donation, increase the number of donors extended criteria donor and developing on samples in a state of brain death.

The brain-dead renal donor: epidemiological profile and obstacles to collection

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Objectives: Renal transplantation, from living donor or brain dead, is the method of choice in chronic renal failure. Principles of generosity and solidarity cannot be realized without the donation. The aim of our work was to describe the epidemiological profile of these potential donors, and to highlight the barriers to kidney removal. **Materials And Methods:** It is a retrospective monocentric study carried out over 7 years (2010 to 2016), collecting the files of all possible donors in the state of death. Recruited by the Coordinating Unit for the Collection of Organs and tissues. **Results:** 68 brain-dead patients were identified, with an average age of 27.7 ± 10.8 years with a male predominance (68%), the Predominant cause of death was severe head trauma (54.5%), followed by accidents Haemorrhagic stroke (18%), with an average length of stay In resuscitation of 3.7 ± 2.5 days and an average creatinine of 14.4 ± 11.6 mg / l. 57.6% of patients were under noradrenaline. 60% of renal cases were associated with corneas or liver donation. Concerning the reasons for non-withdrawal, Were mainly due to the refusal of families (53%), particularly the father, mother and the spouse, and their reasons was the respect of the integrity of the body, the question of Religion, or the absence of an opinion on the organ donation expressed during the Medical contraindications accounted for 28% of non-withdrawals, With 21% cardio-respiratory arrest, 2 cases of HIV and 2 cases of viral hepatitis B. The Other cases reported 2 patients without a family. **Discussion:** The average age of our population is younger than observed in the literature (47 years), Whose major cause of death are stroke, while dominated in our context is traumatic injuries caused by highway accidents. Integrity of the body is a cause of recurrent refusals in other studies. **Conclusion:** Renal donation of brain-dead patients is the key to access To renal transplantation to dialysis without a potential living donor. It is therefore Necessary to optimize sampling by expanding donor criteria and especially to make the existence and importance of the donation of organ known in the society.

Overall inhibitory effect of plasma on T cell activation in kidney transplantation: is there a possible role for plasma exchange

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Objectives: To compare the effect of transplant recipients' plasma and healthy controls' plasma on lymphocyte activation. **Methods:** Peripheral blood mononuclear cells (PBMC) were separated from the blood samples of healthy controls and kidney transplant patients on cyclosporine, sirolimus, and tacrolimus based regimens by density gradient centrifugation, cells were counted and incubated overnight with and without phytohemagglutinin(PHA). The luciferin-luciferase enzyme reaction which induces bioluminescence and the Turner Biosystem luminometer were used to measure intracellular ATP levels in relative light units (RLU) and converted to ng/ml using an ATP standard curve. Chi-square test using Instat 3 program (GraphpadR) was used to compare results. **Results:** PHA stimulation of PBMC from healthy individuals produced a 47% increase ATP production. The ATP increase is reduced to 14% when normal plasma was added ($p < 0.05$). However, when normal plasma was replaced by patient plasma, the ATP increase was reduced only to 31%. Similar difference between patient and control plasma was recorded when using PBMC from transplant patients. **Conclusion:** Plasma isolated from patients on immunosuppressant drugs and more so plasma from healthy controls contain factors which suppress the response of lymphocytes to PHA stimulation. Resulting from this study, we propose that selected plasma with the greatest potency could be evaluated for immunosuppression in transplantation such as part of anti-rejection treatment. Furthermore, factors responsible for the overall inhibitory role of plasma on T cells, needs to be elucidated.

Acute diarrhea in post renal transplantation: 29 cases

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Objective: To describe the incidence, causes, clinical presentation, complications and evolution of acute diarrhea after renal transplantation. **Materials And Methods:** In a retrospective descriptive study, we recorded 29 cases of renal transplant patients who developed acute diarrhea after renal transplantation (3 or more fluid stools / day). Patients with intestinal inflammatory disease and those with diarrhea exceeding four weeks were excluded. **Results:** The average age of our patients is 37.4 (18-57) with sex ratio 4/3, the onset of post transplantation diarrhea varies between 1 and 186 months with an average of 44 months, clinical signs Were digestive 34%, fever in 10%, alteration in general condition and weight loss in 1 case, 55% of the cases showed no accompanying signs. All our patients were under immunosuppressive treatment based on corticosteroid therapy and Mycophenolate Mofetil (MMF), 34% patients on Tacrolimus, 65% of patients on ciclosporin. The mean duration of diarrhea was less than one week in 68.9% and more than one week in 31%. Etiology was infectious in 24%, treatment-related in 31%, secondary to CMV infection in 20 % And without detectable etiologies in 20%, the dosage of T0 ciclosporin was more than 150 in 24%, the prescribed dose was reduced in these patients. Hypotension was found in 5 cases (17.2%), aggravation of renal function in 6 cases (20%), and hyper-leukocytosis in 27.5% of the patients. The germs detected were E.coli type in one patient, candida albican in another and entamoeba histolitica in five patients, urinary tract infection was associated in 20.6% of cases, 55% of patients were treated with antibiotics, the rest received asymptomatic treatment, six patients had recurrence, with good progression and return to creatinine nadir in all our patients. **Conclusion:** Diarrhea is a frequent complication in renal transplant recipients. Its etiologies are multiple and include infectious and non-infectious causes which are multifactorial and sometimes expose to a risk of loss of the graft and even the patient. Some Immunosuppressants agents are considered to be susceptible to the occurrence of infectious or non-infectious diarrhea; The latter is an elimination diagnosis and impose a therapeutic adjustment.

Obstructive renal failure after kidney transplantation: risk factors and evolution

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Objective: To describe risk factors and evolution of post transplantation obstructive renal failure . **Materials And Methods:** retrospective descriptive study, all patient developing obstructive renal insufficiency were included. We studied the early and late characteristics of the stenosis, the number of graft arteries, duration of cold ischemia, type of ureteral anastomosis, placement of double J, occurrence of delayed graft function, acute rejection, immunosuppressive therapy received, infectious episodes, CMV infection, etiologies and therapeutic attitude, and finally graft and patients survival. **Results:** In our study, there were 9 patients with obstructive renal insufficiency, sex ratio M/F is 3.5, the mean age was 36.7 years, the average duration of hemodialysis was 114 months, the average cold ischemia was 293 min, one case of long ureter and of CMV infection were described, the anastomosis was ureterovesical in all patients, with insertion of double J probe except in two patients, a case of delayed graft function and a case of cellular rejection were observed, all of our patients received corticosteroid therapy, tacrolimus was used in 8 cases, obstruction was early in 6 cases and late in the rest, symptoms were dominated by abdominal pain. Two patients were asymptomatic, urinary tract infection occurred in 5 patients, the origin of the obstruction was ureteral stenosis in 7 cases secondary to lymphocele, urinoma or long ureter. The treatment in these cases was based on an ureteric ureteral anastomosis, while the other two cases were a prostate adenoma treated with trans ureteral resection of the prostate and a calicel lithiasis which required simple rehydration. The evolution was good in all patients with return of creatinine to nadir, except in one case where creatinine remained stationary with iterative change of the double J probe. **Conclusion:** Urological complications in post renal transplantation are numerous, their major risk is the obstructive renal failure, the urinary fistula and the ureteral stenosis are the most frequent causes, without omitting ischemic phenomena, delayed diagnosis or therapeutic can have a major impact On the survival of the graft.

Risk factors of acute renal graft rejection

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Objectives: To determine the clinical, biological immunological and demographic risk factors and their impact on the onset of graft rejection. **Materials And Methods:** A descriptive retrospective study, involving all patients who underwent renal transplantation between 2009 and 2016, we have studied all clinical, biological immunological and demographic risk factors and their impact on the onset of graft rejection. **Result:** Over the study period, there were 110 kidney transplants, 11 of them were pre-emptive, the mean age was 32.2 years \pm 11.27, the sex ratio was 1.5. Initial nephropathy was unknown in 59% of cases. The renal graft originates from a living donor in 79% and from deceased donor in 21%. The pre transplantation HLA system was identical in 6.3%, semi-identical in 41% and different in 50.9%. Immunological events were present in 36% (TS: 28% and pregnancy: 10%). Anti-HLA antibodies were present in 14% of transplant recipients. The induction treatment was based on thymoglobulin in 54.5% versus simulect 37.2% ($p = 0.057$). Acute rejection occurred in 8.18%. Novo DSA appeared in 2.72%, which was significantly related to the humoral rejection ($p = 0.00001$). While the donor type, duration of hemodialysis, number of mismatch and ischemia time were not significantly related to the occurrence of the rejection. **Conclusion:** The occurrence of acute renal transplant rejection is the major determinant of short- and long-term graft's survival. De novo DSA was significantly correlated with the occurrence of rejection, the prescription of basiliximab may also constitute a rejection factor. This fact gives an important place to the stratification of the immunological risk, and to establish the immunological profile of each patient.

Risk factors and long-term outcomes of delayed graft function in deceased donor renal transplantation

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Objectives: Delayed graft function (DGF), defined as the need for dialysis within the first week post transplantation, occurs in approximately 25% of deceased donor (DD) renal transplantation cases. The purpose of this study was to analyze the risk factors for delayed graft function (DGF) and determine its impact on the outcomes of DD kidney transplantation (KT). **Methods:** It is an analytical retrospective study including all DD KT between 2010 and 2015. The search of DGF factors was made by comparing 2 groups: group I, DGF; group II: non-DGF. **Results:** 29 patients were included. The mean age DD was 22 ± 6.89 years, and mean serum creatinine at retrieval was 1.1 ± 6.32 mg/dl with mean urine output 220 ± 136.02 ml/h in the last hour. The recipients mean age was 42 ± 9.77 years, with mean duration in hemodialysis 77.6 ± 50.2 months. 14 recipients experienced DGF. The donor serum creatinine was higher in the DGF group (14.7 versus 8.7mg/l, $p=0.008$). There was no difference in recipients age, sex, prevalence of anti HLA anti bodies between the two groups. The number of human leukocyte antigen mismatches was higher in the DGF group ($p=0.01$). The cold ischemic and warm ischemic times were higher but not significantly in the group with DGF. Serum creatinine at the first month was higher in the group I ($p=0.01$), and also at one year. Urologic complications were comparable between the two groups. After a mean follow up of 28 months, we noted 2 deaths in every group with one graft loss in the DGF group, and the mean serum creatinine was comparable ($p=0.9$). **Conclusion:** In our patients, there was no significant difference in graft survival between the DGF and non-DGF groups.

Organ donation: epidemiological factors influencing consent of families of brain-dead patients

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Objectives: This work was to determine epidemiological factors influencing consent of families of brain-dead patients. **Materials And Methods:** This is a retrospective monocentric analytical epidemiological study in September 2010 to April 2016, including all brain-dead patients Whose families were approached for a possible organ donation. Consenting families (A) and those refusing the donation (B). **Results:** 61 patients were identified as potential donors, 35 families refused donation (57.4%) and 26 agreed (42.6%), the delay between the announcement of brain death and the issue of organ donation was the same for all. There was not significant difference in relation to male sex ($p = 0.26$), nor to family status ($P = 0.9$), the cause of death according to whether it was traumatic or medical Statistically has no significant influence ($p = 0.63$). However, the mean age was Significantly higher in the group refusing donation ($p = 0.02$), with a duration Of mean stay in intensively resuscitated patients was significantly shorter ($p = 0.03$). **Discussion:** The significantly shorter mean age for the consenting group is compatible with the American and Dutch study data, and would be related to the Assumption that their young parents might have wished to donate their organs Without having had time to express it during its lifetime. The greater refusal rate Observed in shorter stays in resuscitation could be associated with a time Acceptance of cerebral death in one hand, in the hand the idea of these concepts are not always clear to families. **Conclusion:** Due to the widening gap between the growing demand for transplants in Renal disease and the scarcity of grafts, the organization of campaigns should raise awareness of The importance of organ donation to the society.

Antithymocyte globulin versus basiliximab induction therapy in kidney transplant: is there a difference?

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Objective: Induction therapy is used to reduce the incidence of acute rejection and to prevent or treat delayed graft function. The purpose of our study is to compare efficacy and safety of antithymocyte globulin versus basiliximab. **Methods:** A descriptive and analytical retrospective study, including all patients transplanted from living donor receiving induction therapy, between 2009 and 2015. We analyzed the clinical data from patients who received ATG or basiliximab. The patients in the ATG group received ATG and those in the basiliximab group. All patients received standard triple immunosuppressive therapy with calcineurin inhibitors, mycophenolate mofetil, and steroids. **Results:** Our study was about 68 patients, 35 received ATG (group1) and 33 basiliximab (group2). Average age in group 1 was 37.3 years (± 11.8) with sex ratio men/women 1.5, and 25.5 years (± 13.0) with sex ratio men/women 1.35 in group 2. Donor age was 43.8 years (± 13) in group 1, and 44.3 years (± 11.3) in group 2. In analytic study, serum creatinine levels were lower in the basiliximab group on postoperative month 3 9.86 mg/l ($p < 0.01$), a better creatinine nadir 9.09 mg/l with no delayed graft function ($p = 0.003$) and a lower incidence of hematological complications ($p = 0.003$). However, no differences were seen between ATG and basiliximab in term of biopsy proven rejection, renal function one year after kidney transplant, viral and bacterial infections, especially CMV, and neoplastic complications. **Conclusion:** Basiliximab may improve short-term outcomes, compared with ATG, in patients who had kidney transplants. However, long-term outcomes seem to be similar with ATG and basiliximab. It may be safer to use basiliximab for induction therapy in kidney transplantation.

The association of pancreatitis and kidney transplantation: frequency, evolution and etiologies

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Objectives: The aim of our work is to highlight acute pancreatitis, its incidence, its clinical aspects and its evolution, as well as to try to determine its etiologies. **Materials And Methods:** This is a monocentric retrospective descriptive study involving all renal transplant patients with acute pancreatitis from 1990 to 2016, based on demographic, clinical, biological and radiological data. **Results:** 7 renal transplant patients had acute pancreatitis (incidence 2.7%). In 2 cases, there was a history of cytomegalovirus infection and in 2 others gastritis, without any notion of ethylism. All were under immunosuppressive therapy involving corticosteroids and mycophenolate mofetil except in a patient receiving mycophenolic acid, 4 of them also under anticalcineurins. All patients presented abdominal pain. The mean lipase was 25-fold normal, with no dyslipidemia. Abdominal CT, 4 patients had pancreatitis stage C with the classification of Balthazar, 2 stage E and 1B. One case was of lithiasis origin, the other presumed etiologies were viral (2), autoimmune (1) toxic (3) due to immunosuppression. On the therapeutic level, all our patients were put under symptomatic medical treatment by reducing immunosuppressive threshold in 3 cases, one transplant received aciclovir and another ganciclovir, with cholecystectomy at a distance from the episode. The evolution was favorable in 5 cases, and 2 died of septic shock and pneumopathy with varicella. **Discussion:** Acute pancreatitis in renal transplant recipients is rare, occurring in 1 to 2%, although incidences to 7% have been reported. Their etiologies are not always determined, as immunosuppressive treatment is most often incriminated, possibly viral origins have been described, Without removing the classical causes, especially ethyl, lithiasic or even metabolic. Their prognosis is related to a mortality rate of 50 to 100%. **Conclusion:** The appearance of abdominal pain in the renal transplant should evoke acute pancreatitis motivating first a dosage of lipasemia, in order to institute a rapid management avoiding an evolution which can be lethal.

Mammography screening of hemodialysis patients waiting for renal transplant: what lesions? what care?

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Objectives: To describe findings on screening and management of breast abnormalities revealed by mammography in patients waiting for renal transplant. **Materials And Methods:** Descriptive retrospective study on the database since 2010 of our unit. The evaluation included epidemiological data, mammography performed as part of the kidney transplant study, management and outcome of patients. **Results:** A total of 28 patients over the age of 40 had a screening mammogram. The average age was 52.3 years. All patients were already on hemodialysis with an average duration of 8.9 years. Almost 61% had abnormal mammography abnormalities according to the ACR classification as follows: ACR1 39%, ACR2 46%, ACR3 11%, ACR4 4%, ACR5 0%. In terms of management, ACR3 patients benefit from close monitoring. The patient ACR4 is addressed in gynecology for biopsy. Currently no cases of cancer have been reported. **Conclusion:** The prevalence of mammographic abnormalities in pre-renal transplantation is not negligible. Their research remains justified because they can evolve towards malignancy. **Key Words:** Tumor, renal transplant, screening.

Anti-HLA antibodies profiles

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Objectives: The importance of candidate antibodies against HLA is an area of ongoing interest, with implications for access to transplant and post-transplant outcomes. This study aim was to define patients enrolled in waitlist immunization profile, and to provide its risk factors. **Methods:** We performed a cross-sectional descriptive study including all patients enrolled in our local wait list from 2010 to April 2016. We compared two groups; the group I comprises patients with anti-HLA antibodies and the group II with no anti-HLA antibodies to deduct risk factors of immunization. In second time, we analyzed the time duration on wait list before transplantation in people that already received renal transplant from cadaveric donors. **Results:** We included 88 patients. Anti-HLA antibodies were found in 30 patients (34.09%). In those patients, the majority (43.3%) had Anti-HLA antibody class I and II associated, followed by class I and class II separately (respectively in 36.66% and 10%). When comparing the two groups, group I patients were older, and the duration on hemodialysis was longer (102.76 ± 78.19 versus 61.69 ± 43.91 , $P=0.01$). The others factors significantly associated were history of transfusion, anterior renal transplantation and pregnancy ($P=0.006$; $P=0.04$; $P=0.01$). Among the subjects included, 29 (33%) were transplanted from deceased donors. In those patients, only 4 (13.7%) had anti-HLA antibodies. In second time we compared the time on waitlist before transplantation, it was longer among patients immunized (38.75 ± 20.43 versus 25.04 ± 15.77 , $P=0.27$). **Conclusions:** Patients immunized enrolled in waitlist are probably less likely to received renal transplant from deceased donors.

Epidemiological and lesional profile of helicobacter pylori infection in patients undergoing renal transplantation

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Objectives: Renal transplantation with long-term immunosuppression increases not only the risk of digestive lesions, especially gastric cancer, but also the risk of infection with *Helicobacter pylori* (HP). Hence, a digestive fibroscopy with histology is performed systematically in the pre-graft regimen. The aim of our study was to evaluate the epidemiological and lesional profile associated with HP infection in our patients waiting for renal transplantation. **Materials and Methods:** Retrospective descriptive and analytical study on the pre grafting database of the renal transplant unit of the Department of Nephrology, Dialysis and Renal Transplantation of the CHU Ibn Rochd of Casablanca in Morocco. It included patients who have systematically benefited from high digestive endoscopy with HP research. Antral biopsies, antro-fundal junction and fundus were systematic as well as endoscopic lesions. The diagnosis of HP infection was made on biopsies. A comparative study was performed between HP positive and HP negative patients. **Results:** A total of 66 patients were included in the study. All were hemodialysis patients. The mean age was 41.8 years with a female predominance in 56% of cases. The mean duration of hemodialysis was 7.8 years. At the time of the fibroscopy, 50% was symptomatic, especially epigastralgia. The prevalence of HP infection was 47%. HP infection was significantly associated with epigastralgia (36% vs 13% $p = 0.02$) and histologically with gastritis (42% vs 17% $p = 0.01$). All positive HP patients were treated effectively. **Conclusion:** The prevalence of HP infection in our patients in pre-renal transplant is not negligible, usually symptomatic. This reaffirms the value of systematic screening before transplantation.

Challenges of establishing kidney transplantation services in developing countries – the case of tanzania

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Objective: To describe Challenges in establishing a transplantation program. Sub-Saharan Africa has a rapid growing burden of chronic Kidney Disease (CKD) and End Stage Kidney Diseases (ESKD). This region has the lowest capacity for managing these conditions and has the least number of patients on renal replacement therapy. Tanzania started efforts to provide treatment for patients with ESRF and initially they were sent to St. Thomas Hospital in United Kingdom and recently patients have been sent to India for kidney transplantation. Sending patients for kidney transplantation may not be sustainable and cost effective as it may not encourage local capacity building. **Methods:** This abstract will review efforts done by the Government of Tanzania through the ministry of health to ensure was effective and sustainable and cost effective treatment of patients with ESRF in Tanzania. **Results:** More than 200 kidney transplant recipients are receiving care in Tanzania, most of the patients received surgical treatment in India. These patients are receiving triple immunosuppression and their follow up is done locally at the Muhimbili national Hospital, which is the national referral hospital. There are several challenges which are encountered in providing pre-transplantation and post transplantation care for patient with ESRF and their donors. This presentation will explore the challenges and measures in place to mitigate these challenges. The presentation will also explore the process of identifying potential kidney donors and preparation before the surgery. The ministry of health has embarked in an initiative to make transplantation locally and a team of health care providers were sent to India for short exposure to gain first-hand experience of the treatment procedures. **Conclusion:** The growing burden of ESRF in Sub-Sharan Africa calls for concerted efforts to improve capacity for provision of cost effective treatment locally. These calls for bold decision, political will and enthusiasm of the health care providers.

Malignant angiolysis in renal transplant patients: should we treat the recipient or the donor or both?

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Objectives: To present a case of severe strongyloidosis in a renal transplant recipient. **Clinical case:** In June 2013, two kidney transplants were carried out in our department from a single donor, a 59-year-old man from a French island in eastern Madagascar. The right kidney recipient was a 75-year-old Caucasian white woman with a chronic terminal renal disease of nephrotoxic origin who stayed for 1 month on a Caribbean island in 1992 and cruised to the Caribbean in 2000. None History of exploration or treatment of strongyloidosis. The induction treatment was based on methylprednisolone and thymoglobulin and then relayed to maintenance by tacrolimus, mycophenolate mofetil, and prednisone. Two months after the transplant, the patient was hospitalized for alteration of the general condition, cough and diarrhea with abdominal pain. Physical examination revealed periumbilical thrombocytopenic purpura. With the exception of the C-reactive protein which was 144 mg / l, the biological balance was unusual. The thoracic CT scan showed an opacity of opac glass at the upper right lobe. Bronchoalveolar lavage, skin biopsy, and parasitological examination of the stools resulted in larvae of *Strongyloides stercoralis*. An oral Ivermectin treatment for a total duration of 3 months associated with subcutaneous veterinary Ivermectin and albendazole for 14 days. **Discussion:** It is important to extend the protocol for preventive deworming of anguillulose to any renal transplant that has stayed at least once in tropical areas. **Key words:** Anguillulose, renal transplant, Ivermectin

Lymphoproliferative diseases post-renal transplantation

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Introduction: Lymphoproliferative diseases represent one of the potentially lethal complications of organ transplantation, forming a group of heterogeneous lymphoid proliferations by their clinical presentation and histological aspects, ranging from reactive plasma hyperplasia to the appearance of malignant lymphomas. The appearance of these pathologies is around 1% in renal transplant patients. **Materials and methods:** We report 3 cases of kidney transplant patients who presented after renal transplantation lymphoproliferative diseases. The aim of our work is to illustrate the clinical, para-clinical, therapeutic and evolutionary presentations. **Results:** This is about three renal transplant patients, one woman and two men, aged 49, 21 and 65, respectively. The transplanted kidney to the female patient came from a Brain death donor and in the other 2 patients from relative living donors. The diagnosis of the lymphoproliferative disease in the female patient was diagnosed following a haematological attack, motivating the realization of a myelogram that confirmed a light chains myeloma. For the 2 other male patients, they presented a tumor syndrome, a biopsy performed in these 2 patients revealed large cells of B lymphoma associated with a positive EBV PCR. The average time between transplantation and diagnosis was between 1.5 years and 15 years. For the female patient, she received a chemotherapy protocol based on dexamethasone, cyclophosphamide and thalidomide. The evolution was marked by the return on hemodialysis and then the death of the patient following infectious complications. For the 21-year-old patient, he benefited from the R-CHOP chemotherapy protocol with a clinico-radiological remission, and an improvement in the renal function. For the 65-year-old patient, a rituximab-based treatment was initiated with reduced immunosuppression. The evolution was marked by the death of the patient. **Discussion:** The lymphoproliferative diseases post renal transplantation differ from those of the immunocompetent subject by their viro-induced trait (EBV), their frequent extraganglionic localization, the possibility of brain damage and their potential response to a decrease in immunosuppressive therapy. **Conclusion:** The occurrence of a lymphoproliferative diseases constitutes an evolutionary turning point which threatens the vital prognosis of patients and the functions of the graft, It increases the mortality rates and the returns to dialysis. Patient survival has been improved in recent years through prophylactic measures (avoid EBV infection for seronegative patients) and therapeutic ones (decrease of immunosuppressors).

Metabolic profile of renal transplant patients one year after transplantation

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Objectives: Metabolic complications after renal transplantation (RT) are common and deserve special attention because they represent major factors of cardiovascular morbidity and mortality. The aim of our study was to evaluate the metabolic complications after RT, their frequency, cofactors affecting their occurrence, their management, their evolution and short term impact on the renal graft. **Materials and methods:** This is a retrospective study of kidney transplantations between 1981 and 2013 performed in our department. We identified the demographics of the donor and recipient, immunosuppressive therapy and clinical, biological as well as anthropometric parameters prior to RT, and at 6 and 12 post RT. **Results:** We collected data on 105 kidney transplant patients with a mean age of 32.9 +/- 11.7 years, a sex ratio of 1.5. The initial nephropathy was of undetermined origin in 52.9% of cases, glomerular in 25%, tubulo-interstitial in 15.4% and vascular in 2.9% of cases. The prevalence of NODAT (New Onset Diabetes After Transplantation) was 14.3% with a median time to onset of 5.8 months. A year after RT, 51 patients had dyslipidemia, an incidence of 52%. Statins were used only in 12.7% of patients. The incidence of obesity was 5% and that of overweight patients was 36% one year after RT. Hyperuricemia was present in 44% of transplant patients, hypertension in 70.5%. Corticosteroids were prescribed in 94.4% of cases; cyclosporine in 80%. Graft loss was observed in 12 patients. Three patients died, one with a functioning graft. In univariate analysis, pre-existing hypertension prior to transplantation was found to be a risk factor for graft loss as well as return to dialysis ($p = 0.04$). **Conclusion:** Metabolic complications post RT are common and deserve special attention because they represent a major factor of morbidity and mortality. Early patient information is crucial in their prevention and is based on a multidisciplinary approach.

Pre-existing hypertension in renal transplantation: impact on blood pressure profile and graft survival

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Objectives: High blood pressure (HBP), being a risk factor for cardiovascular mortality, is common in patients with terminal renal failure and those with renal transplants. The causes of hypertension in transplant patients are numerous and among them is pre-existing hypertension prior to transplantation. The objective of this study was to analyze the characteristics of pre-transplant hypertension, its course, impact on graft function and cardiovascular mortality. **Material and Method:** This is a retrospective study of kidney transplantation between 1981 and 2013 in our department. Hypertension was defined according to WHO criteria (SBP ≥ 140 mm Hg and / or DBP ≥ 90 mmHg). In order to assess the impact of HBP: severity, impact on renal and cardiovascular function, renal transplant patients were divided in two groups: G1 (preexisting hypertension) and G2 (normotensive before RT). **Results:** We collected records for 103 kidney transplant patients with a mean age of 33.12 +/- 11.8 years. Fifty-one (51) patients had HBP before transplantation (G1), a prevalence of 49.5%. One year after transplantation 71.3% of RT patients were hypertensive. The prevalence of HBP was higher in hypertensive patients in pretransplantation compared to normotensive (84.4 vs 59.2% $p = 0.007$). There was no difference in blood pressure levels between the two groups. But blood pressure control was more difficult in transplant recipients with pre-existing HBP; in fact, at least two antihypertensive drugs were required in 65.8% (vs 31%). Optimal blood pressure control (BP $< 130/80$ mm Hg) was obtained in only 11.9%, but 77.1% of TR had a BP $\leq 140/90$ mmHg and there was no difference between the two groups. The most commonly used antihypertensive drug types were respectively: Renin angiotensin aldosterone system inhibitors in 70.5%, calcium channel blockers: 47% and beta-blockers: 17.6% and diuretics in 11.7%. In this study the prevalence of hypertension was higher in patients with HBP in pre-transplantation. As found in the literature, pre-existing hypertension is an independent risk factor for the occurrence of hypertension in renal transplant patients. This type of hypertension is usually more severe and more difficult to control, as attested by the need for more antihypertensive drugs. After a median follow-up of 5 years, owing to the young age of our transplant patients and the short monitoring period, we had but a few cardiovascular events. The return to dialysis was significantly more frequent in G1, which shows the need for good blood pressure control. **Conclusion:** Pre-existing hypertension is frequent in transplant patients and tends to persist in post transplantation. It is usually more severe, more difficult to control and increase the risk of graft loss, hence the need for adequate care.

Weight gain in renal transplant patients and this consequences: monocentric experience of the ibn-sina university hospital in rabat

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Introduction: Weight gain is frequent after renal transplantation (RT). Obesity and overweight are associated with an increased risk of cardiovascular mortality in the general population. Among the transplant recipients, several factors contribute to this increase of weight. The aim of this work is to evaluate the prevalence of overweight in renal transplant patients, to determine risk factors for overweight and its impact on graft function.

Materials and methods: This is a retrospective study of renal transplant patients from 1981 to 2013 followed at the Ibn Sina University Hospital in Rabat. The classification of the WHO of BMI was used. **Results:** We collected 129 renal transplant patients with an average age of 35.7 +/- 11.5 years. The initial nephropathy was unknown in 50.4% of cases, glomerular in 20.9%. Only 5 patients, had diabetic nephropathy. The mean BMI before transplantation was 22.09 +/- 3.72 kg / m². After transplantation there is a steady increase in the average weight (and hence of the BMI).

Thus the average weight increased from 62.17 ± 13.2kg before the transplant to 68.6 ± 12.2kg at 12 months to reach 69.4 ± 12.1kg at 5 years after renal transplantation. One year after the transplant, the average pre-transplant weight was 10.3%, which in turn increased the prevalence of overweight and obesity. The risk factors for one-year obesity are the age of the donor (p = 0.032) and the existence of overweight in pre-transplantation (p = 0.007). The prevalence of urinary infections (p=0,013) and delayed graft function (DGF) (p=0,01) is greater in those overweight patients before transplantation. We found no relationship between overweight and obesity and graft function at one year. **Conclusion:** Weight gain is frequent in post-transplantation. Overweight and / or obese renal transplants have a higher prevalence of urinary tract infections and DGF, hence the need for effective management.

Infectious complications in renal transplantation: CMV disease (hepatitis and retinitis) : a case presentation

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Objectives: To describe a case of CMV hepatitis and retinitis in a renal transplant recipient. **Materials And**

Methods: We are reporting a case of CMV hepatitis and retinitis in a 35 year old renal transplant recipient. On chronic hemodialysis since 2012 for an undetermined nephropathy. Transplanted on the 01/06/2015 with one of the mother's kidneys of semi-identical HLA. As concerns the serologies, the donor was CMV (+) and the receiver CMV (+) (D+/R+). Immunosuppressive medications were methylprednisolone and ATG for two days, relayed with tacrolimus, MMF, and prednisolone, 2 months following transplantation, he was admitted for CMV fulminant hepatitis with severe liver cell cytolysis (liver enzymes 100 x more than normal) and serum antigen P65 positive (12 nuclei), treated with ganciclovir with a good clinical and biological outcome. Four and a half months following transplantation, the patient is readmitted for left visual scotoma which had been evolving for 2 weeks, with altered liver function test (relapse of liver cell cytolysis). The diagnosis of CMV necrotizing retinitis was retained after ophthalmologic examination (funduscopy and angiography). After parenteral treatment with ganciclovir for 3 weeks, the evolution was unfavorable with loss of vision of the left eye and persistent altered liver function test. The contralateral eye was unaffected. **Discussion:** CMV retinitis is classically rare and occurs late. It is usually seen from the 6th month following transplantation. 4 months in our patient. CMV infection is favored by immunosuppression (ATG, MMF, CTC). It is prevented by monitoring the viral load and parenteral valganciclovir in the first 4 months following transplantation. Our patient was not at high risk for CMV infection, nonetheless, he acquired CMV retinitis and hepatitis. It could be prevented by prophylactic antiviral. **Conclusion:** CMV infection is the most common viral infection in organ transplantation. It is favored by immunosuppression. CMV retinitis, fortunately remains rare owing to the contribution of the antiviral prophylaxis. The outcome depends on the early onset of treatment.

Belatacept versus tacrolimus in non-heart beating deceased donor kidney transplantation

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Objectives: Transplantation using Maastricht type II (MII) deceased donor (DCD) is an interesting option to increase access of patients to kidney Transplantation (KT). Belatacept, a non toxic immunosuppressive drug for the prevention of acute rejection could be an alternative therapy to calcineurin Inhibitors (CNI). It has been demonstrated to improve renal function of kidney-transplant recipients with extended criteria donors including Maastricht III. The objective of this study is to evaluate the use of Belatacept instead of Tacrolimus as a cornerstone molecule in patients transplanted with kidney of MII donors. **Methods:** This is a retrospective study with 36 patients that have received KT from a DCD MII donor between March 2011 and March 2016. All patients received thymoglobulin Cellcept and steroids. 12 patients received a maintenance treatment with Belatacept, 19 received Tacrolimus. **Results:** Patients treated with Belatacept recovered diuresis and renal function respectively at day 5 and 18 compared to 9 and 22 in those treated with Tacrolimus. The recovery tend to be significantly different ($p=0.15$ and $p=0.17$). 4 grafts were lost because of thrombosis and one had a renal infarct. The renal function as defined by creatinin was better in the Belatacept group at 3 months ($120.7 \mu\text{mol/L}$ v/s $160.7 \mu\text{mol/L}$ $p=0.01$) and one year ($115.5 \mu\text{mol/L}$ v/s $141.2 \mu\text{mol/L}$ $p=0.09$) following transplantation. Acute rejection rates and the safety profiles of belatacept-based and tacrolimus-based treatment were similar. **Conclusion:** Belatacept may be an interesting molecule for patients receiving Kidney transplantation from a MII DCD donor.

Renal transplantation in AA amyloidosis : efficacy of immunosuppressor treatment

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Objective: The objective of this work is to highlight the role of immunosuppressor treatment on the transplant and the underlying inflammatory disease. **Methods:** We evaluated the clinical benefit of immunosuppressor treatment to a kidney transplanted patient whose underlying nephropathy was AA amyloidosis secondary to Crohn's disease. Clinical, biological and morphological parameters were used in this evaluation. **Results:** A 34 year-old female patient presented impure nephrotic syndrome (impaired renal function, hypertension) secondary to Crohn's disease at the age of 30 years. There was no correlation between renal manifestations and other target organ damage on pathology. Indeed salivary glands biopsy showed no amyloid deposits while renal biopsy revealed them on glomeruli and renal arterioles. After 4 years of intermittent hemodialysis she was transplanted from a 1st degree (her brother) related living donor with identical HLA. Immunosuppressor treatment associated steroids, thymoglobuline, mycophenolate mofetil and tacrolimus. The surgical insertion of the transplant in the right iliac fossa was fastidious due to the presence of a lot of adhesions. 13 months after transplantation renal function is stable; creatinine was 9mg/l with glomerular filtration rate/MDRD at $76 \text{ml/min/1.73 m}^2$. There was no proteinuria and no abdominal crisis. The transplant biopsy will be carried out in case of transplant dysfunction. **Conclusion:** AA Amyloidosis remains a severe complication of Crohn's disease which can be managed with suppression of inflammatory activity. The immunosuppressor treatment prevents rejection, stabilizes both renal function and underlying renal disease, thus providing better patient and transplant survival.

Tacrolimus versus cyclosporine in the genesis of hypertension after kidney transplantation

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Objectives: Arterial hypertension (HTA) is common after renal transplantation (TR). Immunosuppressive therapy is one of the causes incriminated in its genesis. Our aim was to compare the effect of the two molecules: ciclosporin A versus tacrolimus on the blood pressure after TR. **Materials and methods:** This is a retrospective study of 9 years (2007- 2015) with a minimum follow-up of 3 months including 149 kidney transplant patients divided into two groups, one hypertensive after TR (G1 = 64) and the other with normal blood pressure (G2 = 85). **Results:** The mean age of our patients was 35.72 ± 10.85 years. Two-thirds of our transplant recipients were men (67.8%) and one-third were women (32.2%) with a sex ratio of 2.10. All patients were treated with corticosteroids and MMF with or without Ciclosporin A or Tacrolimus. 52 patients received maintenance immunosuppression with MMF and Ciclosporin (34.8%) and 76 with MMF and tacrolimus (51%). From 52 patients who received ciclosporin, we observed 32 cases of hypertension (61.5%), compared with 45 patients (59.2%) hypertensive in the tacrolimus group without significant difference, $p = 0.633$. The mean number of antihypertensive agents was 0.88 ± 0.98 in the ciclosporin group and 0.89 ± 0.96 in the tacrolimus group with no significant difference between the 2 groups. Mean Systolic blood pressure (PAS) calculated in M3, M6, M12, M24, M36, M48, and M60 were higher for patients treated with ciclosporin in maintenance than in the other tacrolimus treated groups with a significant difference in M3, M6 and M36, $p = 0.047$, 0.041 and 0.029 respectively. The mean diastolic blood pressure (PAD), calculated at M3, M6, M12, M24, M36, M48 and M60, were lower in the Tacrolimus-treated group in the first two years with a significant difference only in M6 ($p = 0.007$) than the group treated with Ciclosporin. **Conclusion:** Tacrolimus, an anticalcineurine also providing hypertension, but most studies have shown that HTA is more frequent and more severe under Ciclosporin A than with tacrolimus and even an improvement in blood pressure after conversion to tacrolimus. This is explained by the action of ciclosporin A on 3 targets: the sympathetic nervous system, the vascular structures of the kidney, and the Na⁺ transporters in the loop of renal Henlé in association with direct nephrotoxicity. In this study, we did not find any significant association between Ciclosporin A and HTA after TR, which correlated with the results of other authors who observed a trend towards lower values with Tacrolimus.

Immunosuppressive regimens in human leukocyte antigen identical living donors and results

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Objectives: Patients receiving renal graft from Human Leucocyte Antigen (HLA) identical sibling show excellent long-term graft outcome and seem to need less immunosuppression. However, no recommendation is given by the guidelines in this population. Our aim is to report our experience in transplantation from HLA-identical sibling, to describe regimens used in those patients and the outcome. **Methods:** We reviewed retrospectively the records of 10 patients transplanted from HLA-identical living donors from January 2010 to June 2015. We collected treatment data and noted the outcome. **Results:** Mean recipients age at transplantation was 38.3 years old. All patients had unknown native kidney disease. The mean dialysis duration before transplantation was 50 months. No patient showed anti-HLA antibodies by Luminex Technology. Patient and graft survival was 100% at one year and after mean follow up of 42.87 months. Just one patient received basiliximab induction; the others didn't receive any induction, and were given just prednisone and mycophenolate mofetil. Two patients experienced an early acute cellular rejection with no anti HLA antibodies detected at this time. They were treated by intravenous methylprednisolone and tacrolimus introduction with good outcome. Mean serum creatinine was 0.9 mg/dl at one year and at 1.07 mg/dl at last follow up. **Conclusions:** Regimens with only mycophenolate mofetil and prednisone might be a practical and reasonably safe method that could offer a sufficient level of immunosuppression to those patients receiving HLA identical kidney transplantation without unnecessary exposure to expensive and potentially harmful treatments.

Impact of angioplasty of the transplant renal artery stenosis (TRAS)

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Objectives: Kidney transplantation is the treatment of choice for ESRD. The TRAS is the most common vascular complication (1-6%). The purpose of this study was to determine the prevalence, characteristics, treatment (TRT) modalities and the impact of endovascular treatment on the evolution of renal function and hypertension.

Materials and Methods: A retrospective monocentric study, including 160 kidney transplanted patients between 1981 and 2015; the transplant comes from living donor in 157 cases. The Main inclusion criterion is the presence of a (RATS) on 2 doppler ultrasound with speeds > 190cm/s and disruption of downstream flows. Stenosis more than 70% is considered significant. **Results:** The TRAS was present in 25 patients, a prevalence of 15.62%, the stenosis was significant in 6 patients requiring endovascular treatment. Their average age was 39.83±17.7 years with a sex-ratio of 4. The maintenance immunosuppressive TRT was based on steroids, mofetil mycophenolate and cyclosporine A.

Diagnostic was early (<3 months) for 5 of 6 patients and late, in the 18th month, for one. The location of stenosis is ostial in all cases. The HTA is de novo in 16.7 % of cases. The RATS has aggravated the pre-existing hypertension in 83.3 % of cases. Worsening of renal function was observed in 4 patients with a GFR of 36 mL/min/1.73 m on average. No post angioplasty complications were noted. Furthermore, the persistence of a non-significant stenosis was noted in 3 patients. The results are satisfactory with improved renal function: Mean serum creatinine pre- angioplasty was 31.7 ± 10,3mg / l and 13.8 ± 9,7mg / l one month after angioplasty. **Conclusion:** The TRAS is the first vascular complication in patients Transplantes. The screening echo -doppler Lets make early diagnosis not. Angioplasty remains the treatment of choice.

The hematological complications after kidney transplant

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Objective: The purpose of this work is to estimate prevalence of the hematological complications after TR and their impact on the survival of the transplant and the patient. **Patients and methods:** Retrospective study monocentric concerning 70 renal transplanted between January, 2009 and December, 2013. We have revealed the rate of haemoglobin (Hb) after TR, in 1 month, on 6 months and 1 year, as well as the rate of leukocytes and platelets. The threshold used to define an anaemia is Hb < 13g / dl in man and 17g / dl. Leukocytes < 4000 / mm³ defined the leucopenia, platelets < 150000 / mm³ defines the thrombocytopenia. **Results:** The average age is of 37.81±10.84 years (12 years and 65 years) with a light male ascendancy (62.85 %), a haemoglobin meadow transplants average to 11,15 g/dl, prevalence of the anaemia is 28,57 % in 1 month, 17,14 % in 6 months then decreases in 15,71 % after 1 year. The dysfunction of the transplant is the main predictive factor of the arisen of a late anaemia. The polycythaemia appeared at 4 patient's after a median deadline of 4 months. Three patients presented a leucopenia during their follow-up of infectious origin in every case. The thrombocytopenia is noted at 6 patient's of iatrogenic or infectious origin appeared after an average deadline of 5 month. **Conclusion:** The hematological complications after TR are frequent, the causes of neutropenia and thrombocytopenia are widely dominated by the toxicity medicinal and the infections. The anaemia can result as in the chronic renal insufficiency of an iron deficit, an inflammatory syndrome and especially a deficit of secretion of erythropoietin in case of dysfunction of transplant. The hematological complications are frequent further to a TR, their correction is essential to improve the survival of the renal transplant and decrease the mortality

Short and medium-term outcomes of 181 living kidney transplantations in a 08 years period

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Objective: Our aim was to analyse the clinical results of living kidney transplant patients in our department.

Patients and methods: This is an observational and retrospective study of 181 living kidney transplantations performed in our department between 2003 and 2011, we carried out a short and long-term outcomes with a follow-up of 5 years.

Results: we had 181 living kidney transplantation cases. Our kidney donors were 86 females and 95 males with a mean age of 38 years (20-64). Between the recipients the Mean age was 32 years (21-54) with 124 males and 57 females. The mean length of time on renal replacement therapy was 03 months, being the principal modality hemodialysis was performed in 83% of them. Preemptive kidney transplantation (7%). The main primary kidney diseases were: glomerulonephritis (37%), Chronic interstitial nephritis (18%), Urological malformations (7%), hypertensive nephropathy (6%) and polycystic Kidney disease (3%). As induction immunosuppressive therapy: Anti-thymocyte globulin in addition to Mycophenolate Mofetil and Steroids (100%) followed by maintenance therapy using Ciclosporin (58%), Tacrolimus (33%), and Azathioprine (9%) in addition to Mycophenolate Mofetil and Steroids.

In the median term follow-up (5 years): Main complications were: immunologic: acute rejection either cellular or humoral (n=7), chronic rejection (n=5), Surgical complications (n=11), severe infectious complications (n=21). The cumulative patient survival rate was 94% at 1 year and 90% at 5 years versus the graft survival rate of 90% at 1 year and 86% at 5 years. **Conclusion:** Kidney Transplantation appears to provide both better survival and quality of life to patients with end-stage kidney disease.

Overall inhibitory effect of plasma on T cell activation in kidney transplantation: is there a possible role for plasma exchange

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Aim: To compare the effect of transplant recipients' plasma and healthy controls' plasma on lymphocyte activation. **Methods:** Peripheral blood mononuclear cells (PBMC) were separated from the blood samples of healthy controls and kidney transplant patients on cyclosporine, sirolimus, and tacrolimus based regimens by density gradient centrifugation, cells were counted and incubated overnight with and without phytohemagglutinin (PHA). The luciferin-luciferase enzyme reaction which induces bioluminescence and the Turner Biosystem luminometer were used to measure intracellular ATP levels in relative light units (RLU) and converted to ng/ml using an ATP standard curve. Chi-square test using Instat 3 program (GraphpadR) was used to compare results. **Results:** PHA stimulation of PBMC from healthy individuals produced a 47% increase ATP production. The ATP increase is reduced to 14% when normal plasma was added ($p < 0.05$). However, when normal plasma was replaced by patient plasma, the ATP increase was reduced only to 31%. Similar difference between patient and control plasma was recorded when using PBMC from transplant patients. **Conclusion:** Plasma isolated from patients on immunosuppressant drugs and more so plasma from healthy controls contain factors which suppress the response of lymphocytes to PHA stimulation. Resulting from this study, we propose that selected plasma with the greatest potency could be evaluated for immunosuppression in transplantation such as part of anti-rejection treatment. Furthermore, factors responsible for the overall inhibitory role of plasma on T cells, needs to be elucidated.

Deceased renal donor: back on society project

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Objectives: The aim of this work is to describe the epidemiological, clinical, surgical, therapeutic and evolutionary aspects of deceased renal donors. **Material And Methods:** This is a 7-year retrospective monocentric descriptive study (September 2010 to May 2016), involving all renal transplant patients from a deceased donor since the initiation of this program. **Results:** 29 patients were transplanted from a deceased donor after average dialysis duration of 6.5 years and an average waiting time of 2.5 years after entry on the waiting list. 51% were O-blood group and 90% had no HLA antibodies. Mean times were 16h (8h-32h52) for cold ischemia and 1h20 for warm ischemia. All transplant recipients received induction therapy based on Thymoglobulin and a combination of corticosteroids, anticalcineurins and mycophenolate mofetil. 34% showed a delayed graft recovery requiring an average of 5 sessions of hemodialysis. 9 cases of surgical complications were reported, including 3 lymphocele, 2 renal artery stenoses and 1 neoplastic complication including myeloma. The mean creatinine at 1 year post-transplantation was $11.8\text{mg/l} \pm 4.7$ and a single cell rejection was noted. 4 patients died from myeloma (1), tuberculosis (2) and disseminated intravascular coagulation (1). The current mean renal function of all our patients is $11.7\text{mg/l} \pm 4.9$ of creatinine, with no noticeable dialysis return. Renal transplants, especially from a deceased donor, offer better survival than hemodialysis, thus prolonging the life expectancy of 17.19 years compared to that of hemodialysis, which is 5.84 years. **Conclusion:** In the face of such encouraging activity, renal transplantation from a deceased donor is faced with an increasing demand to ensure its sustainability by raising public awareness of the importance of donation. Beyond its symbolism of generosity, but rather as a saving gesture in its own right.

New onset diabetes after transplant: prevalence, risk factors and outcome

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Objectives: This study aims to ascertain the prevalence, clinical and genetic risk factors that predispose to 'New Onset Diabetes after Transplant' (NODAT), and to examine its impact on the outcome of renal transplantation. **Materials and Methods:** We retrospectively reviewed all renal transplants in Groote Schuur Hospital between 2004 and 2008. Patients who were lost to follow up, or had pre-transplant diabetes or primary non function were excluded. A subset of the cohort who gave informed consent was enlisted for genetic tests. **Results:** We identified 111 patients who met the inclusion criteria. The prevalence of NODAT was 20(18%). Risk factors for NODAT include age at transplant ($P=0.03$), body weight ($P=0.04$), treatment for acute cellular rejection ($P=0.02$) and polycystic kidney disease as the cause of renal failure ($p=0.005$). None of the genes investigated (TCF7L2 rs11196205, rs12255372, rs7903146 and HNF1 β , rs1800575, rs121918671, rs121918672) was found to be significantly associated with the risk of NODAT. The genotype frequencies for the SNPs studied were close (though not identical) to that reported for Caucasians compared to that reported for Yoruba (black) population in West Africa. Overall patient survival was 78% while graft survival was 72% at five years. There was no significant difference in patient or graft survival between the two groups. **Conclusion:** NODAT was common in renal transplant recipients. Some of the risk factors predate transplant and could be used to risk stratify patients to determine appropriate risk reduction strategies. The genetic determinants for NODAT in this population may differ from those reported elsewhere.

Screening for subclinical tumors in the renal transplant candidate: what is the risk? what strategy?

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Introduction: The increase in the frequency of many cancers and the increasing age of candidates for transplantation make the question of detection of subclinical tumors before transplantation more and more urgent. Given the relative shortage of grafts, the idea of screening for these tumors is necessary. The methods to be used and their effectiveness remain the subject of much debate. We present in this study the results of screening and management of subclinical tumors in our unit. **Methodology:** Descriptive retrospective study on the database since 2004 of our unit. The evaluation involved epidemiological data, means of investigation, patient intake and outcome. **Results:** Out of 1256 cases evaluated, there were 56 cases (4.4%) of suspicion of occult tumors of which 42 cases (3.3%) were confirmed. The mean age of these 38 patients was 58.3 +/- 8 years with a sex ratio of 3.2. The main tumors were: prostate 13 cases, kidney 10 cases, thyroid, lung, bladder and lymphoma respectively 3 cases each. The main means of diagnosis were clinical (rectal examination) and paraclinic (PSA, thoracoabdominopelvic, cystoscopy, hemogram, immunofixation, hemocult. Therapeutically, depending on the type of tumor, prostatectomy, nephrectomy or thyroidectomy coupled with I 131 brachytherapy was performed. Regarding the fate of the patients, 6 patients were transplanted 25.3 ± 18.3 months after the diagnosis of the cancer. For the rest of the patients, 9 were still on the waiting list, 11 were unsubscribed, 10 temporary contraindications, 2 deaths. **Discussion:** The prevalence of unknown tumors in pre-renal transplantation is not negligible. Their research remains justified because it allows a better take charge and especially a saving of grafts especially for severe cases. **Key words:** Tumor, renal transplant, screening.

Kidney transplantation in patients with multiple myeloma or monoclonal gammopathy of unknown significance. A preliminary report from the Apollo Hospital, New Delhi

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Objective: To report our experience with kidney transplantation in ESRD patients diagnosed with Monoclonal gammopathy of unknown significance (MGUS) or multiple myeloma (MM). **Methods:** End-stage renal disease patients diagnosed with MGUS or MM during pre-transplantation evaluation and who eventually received a kidney graft were followed up monthly to check for relapse of MM or reappearance of light chains in the case of MGUS. For patients with MM, the therapeutic protocol consisted of treating of prior treatment with rituximab followed by allograft bone marrow transplantation before kidney transplantation while those with MGUS received no pretransplant therapy. Immunosuppression (IS) consisted of Tacrolimus, everolimus and steroids. For patients with MGUS, rituximab was used for induction IS. **Results:** In all 11 patients were included in the study (9 with MGUS, 2 with MM). All patients received live-related kidney grafts Post-transplantation follow-up period ranged 3 months to 14 months. There was no relapse in the patients with MM and no light chains were detected in patients with MGUS. Renal function has remained good and stable and no mortality recorded. **Conclusion:** kidney transplantation is safe in patients with MM or MGUS. A longer follow-up period is necessary to confirm these encouraging results. **Key words:** Kidney transplantation, multiple myeloma, MGUS, outcomes

Insuffisance rénale aigue obstructive. aspects cliniques et thérapeutiques: A propos de 100 cas

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Objectifs: Décrire les aspects épidémiologiques, étiologiques et thérapeutiques des patients présentant une insuffisance rénale aiguë d'origine obstructive et pris en charge à Douala au Cameroun. **Matériels et méthodes:** Il s'agit d'une étude rétrospective sur 4 ans (2012-2016) concernant 100 patients (62 hommes et 38 femmes) et dont l'âge moyen était de 44 ans (4-80). Tous les patients présentaient une dilatation des cavités rénales à l'échographie et une insuffisance rénale aiguë (créatinine >14 mg/l) à la biologie sanguine. **Résultats:** La dilatation des cavités pyélo-calicielles était dans 32% des cas d'origine vésico-prostatique, dans 25% des cas d'origine gynécologique et 20% des cas d'origine lithiasique. Une hémodialyse a été réalisée chez 6 patients, un drainage par cathéter sus pubien et sonde vésicale chez 10 et 6 patients, une résection endoscopique chez 29 patients, une néphrostomie chez 20 patients, une sonde endo-urétérale type JJ chez 27 patients et enfin un traitement chirurgical chez 2 patients. La normalisation de la créatinine a été observée dans 72% des cas et seuls 7 patients ont gardé une insuffisance rénale résiduelle. Parmi les complications, on note un syndrome de levée d'obstacle chez 5 patients et 16 patients sont décédés. **Conclusion:** L'insuffisance rénale aiguë obstructive est fréquente en urologie et principalement d'origine vésico-prostatique, gynécologique ou lithiasique. Les techniques mini invasives de drainage telles l'endoscopie aident à une meilleure prise en charge. L'hémodialyse reste dans les situations d'urgence un traitement initial de choix lorsque le pronostic vital est engagé.

Insuffisance renale aigue ischémique communautaire à Abidjan

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Objectif: Le but de cette étude est de décrire les aspects épidémiologiques et cliniques de l'IRA ischémique communautaire dans le service de Néphrologie du CHU de Yopougon. **Matériels et Méthodes:** Etude observationnelle incluant tous les cas d'IRA ischémiques communautaires admis dans le service de Néphrologie du 1er Janvier 2013 au 31 Décembre 2014. Les variables étudiées étaient les caractéristiques démographiques, cliniques et biologiques, la prise en charge thérapeutique et l'évolution de la fonction rénale. **Résultats:** Au total, 56 patients (38 hommes et 18 femmes) ont été inclus. L'âge moyen était 40 ans. Les comorbidités associées étaient l'infection à VIH chez 8 patients et l'hypertension artérielle chez 6 patients. Cliniquement, 12% des patients étaient oligo-anuriques et 64% avaient une hyperthermie. 66% des patients étaient au grade 3 selon la classification AKIN 2007. Les étiologies de l'IRA ischémique étaient le choc septique, les médicaments néphrotoxiques et le choc hémorragique dans respectivement 62.5% , 21,4% et 16% des cas. 47% des patients ont été traités par hémodialyse ; l'évolution de la fonction rénale était redevenue normale dans 73,2% des cas, la récupération partielle dans 19,6% des cas et une évolution vers la chronicité a été observée dans 7,16% des cas. **Conclusion:** l'IRA ischémique communautaire a été observée chez le sujet jeune, les comorbidités étaient le VIH et l'HTA, la principale étiologie était le choc septique. La connaissance de l'étiologie de l'IRA ischémique permettrait donc au cours des pathologies causale d'améliorer l'état hémodynamique du patient afin de minimiser le risque de survenue d'une complication rénale. **Mots-clés :** IRA , ischémie, Choc septique

Insuffisance rénale aiguë post-abortum de 2005 à 2014 à Abidjan.

Weu Mélanie TIA, Gnionsahe Apollinaire

CHU Yopougon

Objectif: Le but de cette étude était de décrire le tableau clinique, le traitement et l'évolution de l'insuffisance rénale aiguë post-abortum de Janvier 2005 à Décembre 2014. **Matériel et méthodes :** Il s'agit d'une étude rétrospective descriptive réalisée dans le service de néphrologie ayant inclus les patientes transférées d'un service de gynécologie pour un avortement clandestin compliqué d'une altération des fonctions rénales définie par une créatinine supérieure à 14mg/l. **Résultats:** Nous avons colligé 20 patientes. L'âge des patientes variait entre 18 ans et 41 ans avec une moyenne de 26 ans. L'utilisation de plantes médicinales dans un but abortif était la méthode la plus fréquente, rapportée par 40% des patientes. A l'admission, les troubles quantitatifs de la diurèse étaient : 14 cas d'oligurie et 4 cas d'anurie. La créatininémie moyenne était de 117,2 mg/l avec des extrêmes allant de 31 à 270 mg/l. Le traitement était l'utilisation des diurétiques chez 13 patientes, la poursuite de l'antibiothérapie chez 15 patientes, la transfusion sanguine chez 18 patientes et le traitement par hémodialyse effectué chez 15 patientes. Chaque patiente a eu en moyenne 5 séances de dialyse. L'évolution a été marquée par la guérison de 6 (30%) patientes avec normalisation des fonctions rénales, la sortie contre avis médical de 6(30%) patientes, le décès de 5 patientes et l'absence de récupération partielle des fonctions rénales chez 3 patientes. **Conclusion:** l'IRA post-abortum dans notre pays est un facteur de morbidité avec une évolution vers une insuffisance rénale chronique dans 15% des cas, une mortalité de 25%. Une éducation des femmes en matière de contraception et de planning familial, est nécessaire et surtout une politique sociale permettant de réduire le nombre des avortements à risque ainsi que les complications engendrées. **Mots clés:** Avortements à risque – Insuffisance rénale aiguë

Syndrome néphrotique de l'adulte à propos de 39 cas suivis au service de néphrologie du CHU Sylvanus Olympio

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Objectif : Décrire les aspects épidémiologiques, cliniques, thérapeutiques et évolutifs du syndrome néphrotique (SN) de l'adulte. **Méthodologie :** Il s'agissait d'une étude rétrospective de 32 mois (janvier 2011- août 2013), portant sur 39 dossiers des patients néphrotiques vus en consultation au CHU Sylvanus Olympio de Lomé. Le syndrome néphrotique a été défini par une protéinurie supérieure à 3g/24h. **Résultats:** Il est ressorti de ce travail, une fréquence de 8,6% de SN en consultation de néphrologie. Le sexe masculin était le plus représenté (64%), avec un sex- ratio de 1,78. L'âge moyen était de 34 ans avec des extrêmes de 15 et 64 ans. Le syndrome œdémateux était le principal motif de consultation soit 61,53% des cas. La protéinurie moyenne était de 6,35 g/24H avec une albuminémie moyenne de 18g/l. Nous avons noté une prédominance du syndrome néphrotique impur dans 72% des cas. La moitié des patients présentait une hypercholestérolémie et il y avait une insuffisance rénale dans 64% des cas au diagnostic. La recherche étiologique effectuée a retrouvé dans 10 cas (25,6%) le VIH, dans 7 cas (17,9%) un diabète, dans 3 cas (7,7%) une drépanocytose et dans 2 cas (5,1%) un lupus. La ponction biopsie rénale a été réalisée chez 2 patients avec comme lésion élémentaire de glomérulonéphrite extramembraneuse. La majorité des patients avait bénéficié du traitement par prednisone (56, 4%). Parmi eux, 2 patients recevaient également des immunosuppresseurs (cyclophosphamide). 43,5% des patient recevaient un traitement symptomatique avec les IEC. Le tiers des patients (13) ont évolué vers une insuffisance rénale chronique et parmi eux 6 vers le décès. Parmi les patients ayant reçu la corticothérapie au nombre de 22, la majorité (59,1%) ont évolué favorablement dans la durée et 40,9% sont restés corticodépendants. **Conclusion:** Au Togo, le syndrome néphrotique est plus fréquent qu'on ne pourrait l'imaginer et a un pronostic réservé. Il est généralement secondaire et la faiblesse de notre plateau technique ne permet pas une bonne exploration qui devrait aboutir à un traitement ciblé plus efficace.

Hypothyroïdie au cours du syndrome néphrotique

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Objectifs: dépister l'hypothyroïdie chez des patients adultes présentant un syndrome néphrotique. **Matériels et Méthodes:** il s'est agi d'une étude prospective transversale, entreprise durant la période du 1er janvier au 31 juin 2016, ayant porté sur 32 patients adultes hospitalisés pour un syndrome néphrotique. Le bilan thyroïdien systématique fait de TSHus et FT4, était fait chez tous les patients, permettant de définir une hypothyroïdie : frustre, avérée et secondaire. L'analyse statistique était faite grâce au logiciel Epi Info. Une valeur de $p < 0,05$ était considérée comme statistiquement significative. **Résultats:** notre cohorte comportait 18 hommes (56,2 %) et 14 femmes (43,8 %), âgés en moyenne de $46,6 \pm 19$ ans. Le syndrome néphrotique était impur dans 84,4 % des cas avec une protéinurie moyenne de $9,4 \pm 5,8$ g/24 heures. Vingt-huit patients (87,5 %) avaient une protéinurie ≥ 6 g/24 heures. La néphropathie sous-jacente était secondaire dans 14 cas, primitive dans 11 cas et imprécise dans sept cas. Les complications communes du syndrome néphrotique étaient retrouvées dans 31 cas (93,9 %) : dyslipidémie ($n=27$), IR ($n=22$), HTA ($n=8$), complications thrombo-emboliques ($n=2$). Le bilan thyroïdien était perturbé chez 15 patients dont 12 hommes et trois femmes, âgés en moyenne de $41,7 \pm 19,1$ ans. Aucun patient n'était symptomatique. Leurs moyennes de TSHus et FT4 étaient respectivement égales à $3,2 \pm 2,0$ (1,5 – 7,9) et $0,7 \pm 0,07$. Les perturbations observées étaient : l'hypothyroïdie frustre ($n=1$), l'hypothyroïdie avérée ($n=2$) et l'hypothyroïdie secondaire ($n=12$). Les anticorps anti TPO étaient négatifs chez tous. Chez nos 15 patients hypothyroïdiens, la néphropathie en cause était secondaire dans huit cas dont cinq cas d'amylose rénale. L'analyse comparative univariée avec les 17 patients sans perturbation thyroïdienne montre que la profondeur du syndrome néphrotique, l'élévation du cholestérol total et le sexe masculin étaient significativement corrélés au risque d'hypothyroïdie ($p : 0,007 - 0,03$). L'altération de la fonction rénale n'était pas corrélée à ce risque ($p=0,4$). **Conclusion:** l'hypothyroïdie franche au décours du syndrome néphrotique de l'adulte est rare. Il apparaît néanmoins dans cette étude que la profondeur du syndrome néphrotique en est un facteur de risque indépendamment de la fonction rénale. Une étude prospective s'avère nécessaire afin d'étayer nos constations.

Les glomérulonéphrites extra-membraneuses secondaires : A propos de 25 cas colligés au CHU Aristide le Dantec de Dakar

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Objectifs: De déterminer le profil épidémiologique, clinique, biologique, histologique et étiologique des GEM secondaires à Dakar. **Méthodologie:** Il s'agissait d'une étude rétrospective descriptive s'étalant du 1er janvier 2011 au 31 décembre 2015, menée au CHU Aristide Le Dantec. Ont été inclus tous les patients présentant une GEM confirmée à l'histologie rénale. Les dossiers incomplets et ceux dont la recherche étiologique de la GEM était négative ont été exclus. Les données épidémiologiques, cliniques, paracliniques et thérapeutiques de chaque patient ont été analysées. **Résultats:** Vingt-cinq dossiers de GEM secondaire ont été colligés sur 108 GEM diagnostiquées, soit une prévalence de 23,14%. L'âge moyen des patients était de 35 ans. Le sex-ratio était de 0,38. Les œdèmes des membres inférieurs et la protéinurie étaient les principaux motifs de consultation, présents dans 40% des cas chacun. Un syndrome œdémateux était présent dans 52% des cas. Les signes extra-rénaux étaient présents dans 60% des cas (n=15). Ceux-ci étaient dominés par les signes articulaires et cutanés. Douze patients (48%) présentaient un syndrome néphrotique. Les autres présentations syndromiques étaient toutes glomérulaires, dont 5 cas de protéinurie néphrotique sans syndrome néphrotique. La fonction rénale était altérée dans 31,8% des cas (n=7). La principale cause de GEM était le lupus systémique (78%). Les autres causes identifiées étaient une connectivite mixte dans 1 cas, une hépatite B dans 2 cas, une tuberculose dans 1 cas, une infection à VIH dans 1 cas, une cirrhose hépatique dans 1 cas et un cas de sarcome de Burkitt. Un traitement étiologique a été mis en place dans 20 cas. L'évolution de la GEM était favorable dans 9 cas sur les 13 patients toujours suivis. Trois patients présentaient une rémission partielle et 1 patient a présenté une résistance au traitement. Nous avons enregistré 1 décès en rapport avec la pathologie causale (sarcome de Burkitt). **Conclusion:** La GEM est une glomérulopathie fréquente de l'adulte. La recherche étiologique doit être systématique et rigoureuse, afin de proposer chaque fois que cela est possible un traitement étiologique qui pourrait entraîner une rémission de la GEM. **Mots-clés:** Glomérulonéphrite extra-membraneuse, Glomérulopathies, syndrome néphrotique, Protéinurie, Dakar

Profil épidémiologique des néphropathies glomérulaires primitives: A propos de 177 cas

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Objectif: D'étudier le profil épidémiologique et évolutif du SN secondaire à une glomérulopathie primitive (GP).

Matériels et méthodes: Notre étude est rétrospective sur une période de 6 ans et concerne 177 patients porteurs de GP confirmées à la biopsie rénale. Nous avons analysé les données cliniques, biologiques, histologiques, thérapeutiques et évolutives des patients. Tous les patients ont bénéficié d'une enquête étiologique comprenant un bilan immunologique et infectieux. La rémission complète est définie par une fonction rénale normale et une protéinurie inférieure à 0,5g/j. La rémission partielle est définie par une protéinurie entre 1g et 3g/j ou une diminution du débit de protéinurie de 50% avec stabilisation de la fonction rénale.

La rechute est définie par la réapparition d'une protéinurie après rémission complète ou une augmentation de plus de 2g/j après rémission partielle. **Résultats:** Il s'agissait de 177 patients, 122 de sexe masculin (sex-ratio : 2,17). L'âge moyen est de $38,8 \pm 15,5$ ans. Le syndrome néphrotique est retrouvé dans 84,2% des cas à l'admission avec une protéinurie moyenne à $7,2 \pm 5,8$ g/j. Sur le plan histologique, la hyalinose segmentaire et focale est notée dans 72 cas (40,6%) suivie par la glomérulonéphrite extra-membraneuse dans 41 cas (23,16%), la néphropathie à IgA dans 24 cas (13,5%), la glomérulonéphrite membrano-proliférative dans 12 cas (6,7%), la glomérulonéphrite aigue post-infectieuse dans 11 cas (6,2%), la glomérulonéphrite extra-capillaire dans 10 cas (5,6%) et la lésion glomérulaire minime dans 7 cas (3,9%). Tous les patients ont reçu un traitement néphro protecteur à base de bloqueurs du système rénine et antihypertenseur chez 61 patients. Une monothérapie dans 26 cas, une bithérapie dans 3 cas et une trithérapie dans 4 cas. L'évolution est marquée par une rémission complète dans 50,3% des cas, partielle dans 29,3% des cas et un échec thérapeutique dans 20,3% des cas. L'importance de la protéinurie, l'insuffisance rénale à l'admission et la présence de signes de chronicité sur la biopsie rénale représentent les principaux facteurs de mauvais pronostic rénal. **Conclusion:** Le syndrome néphrotique relève d'étiologies multiples et de pronostic différent. La présence de signes de chronicité sur la biopsie rénale constitue le principal facteur pronostique dans notre série et dans la littérature.

Amylose rénale chez le sujet âgé : à propos de 51 cas

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CHU Ibn Sina, Rabat

Objectif: Le but de ce travail était de déterminer les caractéristiques cliniques, biologiques, évolutives et thérapeutiques de l'amylose rénale chez le sujet de plus de 65 ans. **Résultats:** L'âge moyen de nos malades est de $66,9 \pm 6,2$ ans (extrêmes : 60 à 80). Un patient avait un antécédent de diabète et sept étaient hypertendus. L'atteinte rénale est dominée par le syndrome néphrotique (SN) noté dans 80,9% des patients et une protéinurie non néphrotique dans 19% des cas. L'insuffisance rénale était présente chez 18 de nos patients avec une créatinine sérique moyenne de $36,6 \pm 31$ mg/l. Le diagnostic d'amylose est porté par la biopsie des glandes salivaires dans 2 cas et par la biopsie rénale dans tous les cas. L'amylose AA était le type le plus fréquemment rencontré (76,2% des cas), l'amylose AL était noté chez 23,8% des patients. La tuberculose était l'étiologie la plus représentée (23,8% des patients) suivie par le myélome multiple dans 19% des cas, la bronchite chronique dans 19% des cas, la polyarthrite rhumatoïde dans 9,5% des cas et la maladie de crohn dans 4,7% des cas. Aucune étiologie n'a été trouvée chez 38% des malades. Après un suivi moyen de 12 mois l'évolution a été marquée par l'amélioration de la fonction rénale (FR) dans 6 cas, stabilisation de la FR dans 9 cas et une aggravation de la FR dans 6 cas, 11 patients sont perdus de vue et 20 patients sont décédés. L'infection était la cause principale du décès. **Conclusion:** Notre série souligne la fréquence et la gravité de l'atteinte rénale au cours de l'amylose du sujet âgé, nécessitant un diagnostic et une prise en charge thérapeutique plus précoce vu le terrain souvent fragile.

Amylose rénale à Dakar : A propos de 20 cas

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Objectifs: Il s'agissait de déterminer la prévalence de l'amylose rénale à Dakar, de préciser ses caractéristiques anatomo-cliniques et de déterminer ses étiologies. **Méthodologie:** Il s'agissait d'une étude descriptive rétrospective menée sur 58 mois au service de néphrologie du CHU Aristide Le Dantec et au service d'anatomie et cytologie pathologique de l'Hôpital Général Grand-Yoff. Ont été inclus tous les dossiers révélant une amylose à l'histologie rénale. La collecte de données a été faite grâce à des fiches de collecte individuelles. Les variables étudiées étaient épidémiologiques, cliniques et thérapeutiques. **Résultats:** Pendant la période d'étude, 818 biopsies rénales ont été réalisées dont 20 ont montré une amylose, soit une prévalence de 2,44%. L'âge moyen était de 40 ± 17 ans et le sex-ratio était de 1,2. La recherche d'antécédents trouvait des maladies inflammatoires chroniques dans 40% des cas. Le délai moyen d'apparition de la maladie amyloïde était de 8 ans après la découverte de la pathologie initiale. Les principaux signes cliniques étaient des œdèmes des membres inférieurs (60%) et une protéinurie à la bandelette urinaire (55%). Une hypotension artérielle était présente dans 10% des cas (n=2), et une hypertension artérielle dans 5% (n=1). Des signes extra-rénaux étaient présents chez 25% des patients (n=5) témoignant du caractère systémique de l'amylose. Un syndrome néphrotique était présent chez 95% des patients (n=19), et 7 patients (35%) avaient une insuffisance rénale au moment du diagnostic. A l'histologie rénale, les dépôts étaient retrouvés au niveau de toutes les structures rénales (glomérulaire=100%, vasculaire=65%, tubulaire =15%, interstitiel=10%). Une biopsie des glandes salivaires accessoires avait été réalisée, montrant également des dépôts amyloïdes. Le typage des dépôts n'avait été réalisé que dans 1 cas, orientant vers une forme hérédofamiliale. La recherche étiologique était positive dans 40% des cas (n=8). La tuberculose était la première cause, trouvée dans 75% des cas. Les autres causes étaient une polyarthrite rhumatoïde et un lymphœdème bilatéral. Un traitement étiologique a été entrepris dans 6 cas. L'évolution était favorable dans 1 cas, 3 patients ont présenté des complications et 2 patients sont décédés. **Conclusion:** L'amylose est une pathologie peu rapportée dans la littérature africaine. L'atteinte rénale est l'une des localisations les plus expressives. Le typage des dépôts amyloïdes permet d'orienter la recherche étiologique. **Mots-clés:** Amylose, néphropathies, syndrome néphrotique, protéinurie, Dakar

Evolution des patients hémodialisés chroniques dans le service de néphrologie et d'hémodialyse du chu du point G

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Objectifs: Notre but était de déterminer l'incidence des différentes complications en hémodialyse chronique, d'énumérer les différents facteurs pouvant influencer la survie des patients et de déterminer les différentes causes de décès. **Méthodes:** Il s'agit d'une étude rétrospective descriptive et analytique des patients en IRCT ayant bénéficié d'EER périodique, entre le 1er Janvier 2010 et le 31 Décembre 2012, dans le service de néphrologie et d'hémodialyse du CHU du Point G. **RESULTATS:** L'âge moyen était de 40,45 ans avec un sex-ratio de 1,05 en faveur des hommes. La néphropathie vasculaire (42%) a été la principale cause d'IRC. La plupart des patients (63,3%) avait un taux d'hémoglobine inférieur à 9 g/dl. Les troubles phosphocalciques étaient hyperphosphorémie+hypocalcémie (51,6%), hyperphosphatémie (38,6%). Les anomalies échocardiographiques étaient l'hypertrophie 59,6%, la dilation 25% et l'association hypertrophie dilatation 15,4%. Les complications inter dialytiques étaient poussées hypertensives 53,5%, prises de poids 30,7% et OAP 15,8%. Les séances d'HD ont été émaillées par les crampes musculaires 34,5%, l'hypotension artérielle 29,7%, les céphalées 24,1%. La mortalité était élevée avec 32,7% dominée par le choc septique 59,2%. **Conclusion:** La prise en charge des patients en IRCT par HD demeure un traitement de choix mais elle n'est pas sans risque. **Mots clés:** Complications, Hémodialyse, Insuffisance rénale chronique.

Traitement des calculs du rein et de l'uretère. expérience du centre medico chirurgical d'urologie au cameroun

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Objectifs: Décrire et évaluer les résultats des traitements des calculs urinaires dans un centre d'Urologie au Cameroun. **Matériels et Méthodes:** Il s'agit d'une étude rétrospective sur 6 ans de 2011 à 2016 concernant 140 patients (77 hommes et 63 femmes) présentant au moins un calcul du rein, du bassinet ou de l'uretère. L'âge moyen des patients était de 42 ans (19-70). La taille des calculs était en moyenne de 15 mm (9-23) et répartis comme suit : rein (34), bassinet (44), uretère (56) et méat urétéral (10). Dans 56,4% le calcul était unique et à droite, bilatéral dans 14%. **Résultats:** Les traitements proposés étaient la lithotritie extracorporelle (35), la pyélotomie laparoscopique (30), l'urétérotomie laparoscopique (10), l'urétéroscopie rigide (44) et l'urétérorénoscopie souple (25). La fragmentation électromagnétique au lithoclast a été réalisée chez 6 patients et le laser Holmium chez 45 patients. Le temps moyen opératoire était de 62 minutes pour l'urétéroscopie rigide, 65 pour la lithotritie extracorporelle, 104 pour l'urétérorénoscopie souple, 140 pour l'urétérotomie laparoscopique et 177 pour la pyélotomie laparoscopique. Le taux de réussite après la première procédure est de 100% pour l'urétérotomie laparoscopique, 96% pour la pyélotomie laparoscopique, 95% pour l'urétéroscopie rigide, 88% pour la lithotritie extracorporelle et 72% pour l'urétérorénoscopie souple. Le taux de complications est de 5% avec 2 brèches urétérales, 1 sepsis, 1 fistule urinaire, 2 coliques néphrétiques ayant nécessité un drainage chirurgical par sonde JJ et 1 décès. **Conclusion:** L'endoscopie tend à prendre une place prépondérante dans le traitement des calculs urinaires. Le choix de la technique reste dépendant de la taille et de la localisation du calcul mais aussi des moyens financiers des patients.

Prise en charge de l'hypertension artérielle au cours de la maladie de takayasu : à propos de 9 cas

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Objectif: Le but de notre travail est d'étudier le profil épidémiologique et thérapeutique de l'HTA au cours de la Maladie de Takayasu. **Matériel et méthodes :** Il s'agit d'une étude rétrospective allant de Janvier 1998 à Décembre 2015, et comportant neuf patients présentant une HTA sévère révélatrice ou associée à la MT. Les dossiers sont colligés au sein des services de Néphrologie et de Chirurgie Vasculaire. Nous avons analysé les caractéristiques épidémiologiques, cliniques, biologiques, radiologiques, thérapeutiques et évolutives des patients. L'HTA est définie par une pression artérielle systolique ≥ 140 mmHg et/ou une pression artérielle diastolique ≥ 90 mmHg selon la définition internationale de l'OMS, de l'ANAES et de la JNC IV. **Résultats :** Il s'agit de 7 femmes et de 2 hommes dont l'âge moyen est de $32,8 \pm 7,3$ ans. La pression artérielle systolique moyenne (PAS) est de $191 \pm 3,2$ mm Hg, la diastolique (PAD) est de $108 \pm 2,14$ mmHg. L'anisotension artérielle entre les deux membres supérieurs est retrouvée dans 55,5% des cas. Les manifestations cliniques sont dominées par des signes neurosensoriels dans 66,6% des cas. Le bilan de retentissement a montré une hypertrophie ventriculaire gauche dans 3 cas, une rétinopathie hypertensive dans 3 cas, une insuffisance rénale dans 4 cas avec une créatinine sérique moyenne à $24 \pm 9,8$ mg/l et une protéinurie supérieure à 2g/24h dans 3 cas. L'angioscanner réalisée chez un patient et l'artériographie chez 5 patients ont objectivé une thrombose de l'aorte avec un aspect grêle des artères rénales (AR) dans 2 cas, une thrombose ou une sténose serrée de l'AR dans 4 cas et un anévrysme aortique englobant les AR dans 1 cas. Les antihypertenseurs sont prescrits chez tous les patients associés à la corticothérapie orale dans tous les cas et au méthotrexate dans 1 cas. L'angioplastie endo-luminale des artères rénales est réalisée chez 2 patients et deux autres patients ont bénéficié d'un pontage prothétique synthétique. Après un suivi moyen de 12 mois, la PAS est de $144 \pm 11,3$ mmHg et la PAD est de $89 \pm 10,5$ mmHg. Seule une patiente est décédée suite à un état de choc hémorragique par rupture d'un anévrysme de l'AR après angioplastie. **Conclusion:** L'HTA est fréquente au cours

Profil de l'examen d'urine et débit de filtration glomérulaire au cours de l'hépatite chronique virale B

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Objectif: Le but de cette étude était de déterminer le débit de filtration glomérulaire (DFG) moyen et le profil de l'examen des urines des personnes atteintes d'HVB chronique. **Méthodologie:** Nous avons mené une étude transversale de janvier 2015 à juin 2015 portant sur des patients âgés de 18 ans et plus atteints d'HVB chronique naïfs de tout traitement antiviral B suivis au CHUY et au CMC. Etaient exclus les patients souffrant d'une pathologie associée pouvant entraîner un facteur confondant du DFG et de l'examen d'urine ainsi que les femmes enceintes. Le DFG était estimé selon la formule simplifiée de la MDRD. L'insuffisance rénale était définie par un DFG 60ml/min/1,73m². Les données ont été analysées à l'aide du logiciel EpiData Analysis version 3.1. Le seuil de significativité retenu était p 0,05. **Résultats:** Au total, 100 patients ont été inclus dans cette étude. Il y avait 57 hommes et 43 femmes et l'âge moyen des patients était de 32,22±0,904 ans. Le DFG moyen était de 101,7±3,54ml/min/1,73m². La prévalence de l'insuffisance rénale était de 5%. L'âge avancé (p=0,001), l'indice de masse corporelle (P=0,008), le sexe féminin (p=0,013) et la charge virale (P=0,04) étaient significativement associés à une diminution du DFG. L'examen des urines à la bandelette montrait une protéinurie chez 8 patients, une leucocyturie chez 11 patients. La leucocyturie était significativement plus fréquente chez les femmes (P=0,035). **Conclusion:** Au terme de cette étude, il en ressort que la prévalence de l'insuffisance rénale et la fréquence des anomalies urinaires sont élevées au cours de l'HVB chronique. Un suivi régulier du DFG et de la bandelette urinaire est indispensable pour dépister ces anomalies et initier une prise en charge précoce. **Mots clés:** Hépatite B; Débit de Filtration Glomérulaire; Protéinurie.

Evaluation du débit de filtration glomérulaire chez l'adulte diabétique

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Objectif: L'objectif de notre étude était d'évaluer le débit de filtration glomérulaire (DFG) chez les diabétiques guinéens adultes par les méthodes de MDRD et de Cockcroft-Gault (CG). **Malades et Méthodes:** De manière consécutive et prospective nous avons examiné 246 adultes diabétiques hospitalisés du 1er/01 au 30/06/2014 en endocrinologie au CHU Donka à Conakry. En fonction du taux de créatinine sérique, le débit de filtration glomérulaire a été calculé selon la formule de Cockcroft-Gault et le MDRD. Ainsi la maladie rénale chronique a été identifiée en cinq stades. Les autres paramètres de l'étude étaient l'âge, le sexe, le type de diabète, la néphropathie diabétique et les autres facteurs de risque cardiovasculaire. Une comparaison des deux formules a été effectuée selon le khi². **Résultats:** L'âge moyen des diabétiques était de 54 ans [18-92], les femmes étaient au nombre de 148 (60%) et les hommes au nombre de 98 (40%). Le DFG calculé par CG a montré la MRC selon les stades 1 (43%) ; 2 (37%) ; 3 (17%) ; 4 (1%) et 5 (2%). Par le MDRD les stades 1 (47.6%) ; 2 (40%) ; 3 (10%) ; 4 (0.4%) et 5 (2%). Le diabète était de type 2 chez 228 patients (93%), gestationnel dans 3 cas (1%) et de type 1 chez 15 patients (6%). Les autres facteurs de risque cardiovasculaire observés étaient l'hypertension artérielle (49%) ; le tabagisme (22%) et l'obésité (11%). La micro albuminurie était observée dans 192 cas (78%) ; la macro protéinurie dans 48 cas (20%) ; la rétinopathie diabétique était présente dans 153 cas (62%) ; l'hémoglobine glyquée était ≥ 7% dans 20 cas (8%). Les principales complications évolutives étaient l'acido-cétose (38%) et la septicémie (31%). Le taux de décès était de 5%. Discussion: Selon l'âge et le sexe la comparaison du DFG selon CG et MDRD n'était pas statistiquement significative (p ns). **Conclusion:** Chez nos diabétiques adultes la maladie rénale chronique au stade précoce est mieux dépistée par la formule de MDRD comparativement à celle de CG. Une fois au stade évolué aucune différence n'a été observée entre les deux formules. **Mots clés:** débit de filtration glomérulaire, diabétique adulte, Guinée.

Place des échanges plasmatiques dans la prise en charge des vascularites nécrosantes systémiques

Saad Djaballah Djihad, F.Haddoum, I.Ferahta, H.Arzour

CHU Mustapha d'Alger

Objectif: Il s'agissait de montrer l'efficacité des échanges plasmatiques dans le traitement des formes sévères des vascularites nécrosantes. **Patients et méthodes:** Une étude rétrospective incluant 8 patients avec vascularites nécrosantes systémiques, admis dans notre service de juin 2015 au juillet 2016 et qui ont bénéficié des échanges plasmatiques en association à un traitement immunosuppresseur. Nous avons analysé les données clinico-biologiques, les indications, les complications et l'impact des échanges plasmatiques sur le pronostic vital et rénal. **Résultats:** Il s'agit de 8 patients dont l'âge moyen est de 36 ans (extrêmes : 9-64) avec un sex-ratio H/F de 1,6. Selon la maladie pour laquelle ils ont été suivis on a trouvé : polyangéite microscopique (4 patients), granulomatose avec polyangéite (Wegener) (2P), la granulomatose éosinophilique avec polyangéite (syndrome de Churg et Strauss) (1P), une périarthrite noueuse non liée au virus de l'hépatite B (1P). L'indication à l'échange plasmatique était les formes sévères de la maladie avec une atteinte viscérale sévère. La moyenne des séances des échanges plasmatiques était de 5 séances (extrêmes : 4-6). La réponse au traitement était bonne chez la majorité des patients avec une rémission totale (sur le plan rénal et extra-rénal) chez 3 patients et partielle chez 4 patients, on a eu un seul décès. **Conclusion:** L'échange plasmatique a prouvé son efficacité dans la prise en charge des formes sévères de vascularites nécrosantes systémiques en améliorant le pronostic vital et rénal à court et à moyen terme.

Place des échanges plasmatiques dans la prise en charge des cryoglobulinémies de type II: A propos de deux cas

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CHU Mustapha d'Alger

Objectif: Nous avons pour objectif de montrer l'efficacité des échanges plasmatiques dans le traitement des formes sévères des cryoglobulinémies de type II. **Patients et méthodes:** Nous rapportons le cas de deux patientes présentant une cryoglobulinémie de type II évoquée devant l'association d'un purpura nécrotique, d'arthrite, d'atteinte neurologique et rénale (syndrome de néphropathie glomérulaire) puis confirmée biologiquement, chez lesquelles des échanges plasmatiques ont été réalisés. La première est porteuse d'hépatite virale C. La seconde présente, une sclérodermie systémique. **Résultats:** Nous avons instauré des échanges plasmatiques à raison de 6 séances avec extraction de 2 litres de plasma et restitution par de l'albumine en association à un traitement antiviral dans le premier cas et à une corticothérapie associée au rituximab dans le second. Nous avons observé une nette amélioration de l'état clinique (régression des lésions cutanées et articulaires) dans notre premier cas et une amélioration notable de la fonction rénale dans le deuxième. Une diminution du taux de cryoglobulines dans les deux cas. Dans notre première observation, de part le risque infectieux important, des plasmaphérèses seules ont été réalisées avec une bonne évolution clinico-biologique. Dans notre 2ème observation, notre conduite était similaire à celle donnée dans la plus part des études: Association d'une corticothérapie orale; d'une immunosuppression et des échanges plasmatiques. **Conclusion:** L'association des échanges plasmatiques à un traitement immunosuppresseur est de grande efficacité vu la rémission rapide engendrée; mais dans les cas où l'immunosuppression court un grand risque au malade, la plasmaphérèse trouve sa place et paraît efficace en donnant de bons résultats à court terme.

Une hypertension artérielle maligne révélant une angiopathie amyloïde cérébrale : à propos d'un cas

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CHU Mustapha, Algiers

Objectif: Nous rapportons un cas exceptionnel d'AAC révélée par une hypertension artérielle maligne avec nephroangiosclerose maligne. **Observation:** Patient K.A âgé de 58 ans, aux antécédents d'hypertension artérielle mal suivie, qui consulte dans le cadre de l'urgence pour l'apparition des mouvements cloniques des membres supérieurs et inférieurs gauches sur un pic hypertensif. Un traitement antihypertenseur était instauré. Le patient était adressé à notre niveau par la suite pour altération de la fonction rénale. Un bilan de retentissement de cette hypertension maligne était lancé qui a trouvé : une rétinopathie hypertensive stade III, une nephroangiosclerose maligne avec dégradation rapide de la fonction rénale et une hypertrophie ventriculaire gauche. La TDM cérébrale a objectivé un hématome capsulo-thalamique droit. L'IRM cérébrale a confirmé l'hématome capsulo-thalamique droit sur leucopathie vasculaire (stade 3 FAZEKAS) et a permis de poser le diagnostic d'AAC (selon les critères de BOSTON). Le patient est mis sous traitement symptomatique. **Discussion :** L'AAC est une variété d'amylose localisée correspondant à un dépôt des protéines BA4 amyloïdes dans les vaisseaux leptoméninges. Bien qu'amélioré par l'IRM cérébrale, son diagnostic reste difficile et nécessite l'exclusion des autres causes possibles d'hémorragie. **Conclusion:** Bien que rare, notre observation illustre l'association d'une AAC à une hypertension artérielle et une nephroangiosclerose maligne. Le pronostic est souvent réservé.

Troubles minéraux et osseux chez les hémodialisés chroniques au CHU du Point G Bamako

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CHU du Point G Bamako Mali

Objectif: Notre but est de faire le bilan du métabolisme osseux de nos patients hémodialisés et l'évaluation des taux de conformité des indicateurs aux recommandations KDIGO. **Méthodes:** nous avons réalisé une étude transversale incluant 32 patients hémodialisés chroniques du centre hospitalier universitaire du Point-G. **Résultats:** L'âge moyen de nos patients était de 49,09 ans. La prédominance féminine a été notée. La calcémie, la phosphatémie, la parathormone intacte, et la vitamine D étaient normales dans respectivement 50%, 56,3%, 18,7% et 71,1% des cas. Les patients répondant simultanément aux quatre critères recommandés par le KDIGO n'étaient que 15,6%. Les principales lésions osseuses ont été la déminéralisation osseuse (37,5%), le pincement (31,3%) et l'ostéoporose (18,8%). **Conclusion:** Le pourcentage des patients qui obéissent à tous les critères demeure non satisfaisant. **Mots clés:** TMO_MRC, Hémodialyse, KDIGO, Déminéralisation osseuse.

Une pyélonéphrite emphysémateuse d'évolution favorable après traitement conservateur

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CHU du Point G Bamako

Objectif : Notre propos est de montrer que le traitement conservateur de la pyélonéphrite emphysémateuse pourrait suffire surtout dans les stades précoces. **Observation :** Nous rapportons un cas de pyélonéphrite emphysémateuse chez une femme de 60 ans, diabétique, qui a évolué très favorablement sous antibiotique sans recours à la chirurgie. **Commentaires :** Décrite pour la première fois en 1898, la pyélonéphrite emphysémateuse est une infection grave engageant le pronostic vital. Affection rare, survenant préférentiellement sur terrain diabétique, est liée au développement de germes anaérobies. Elle peut se compliquer d'un choc septique et d'une défaillance multi viscérale. La tomодensitométrie est l'examen de référence qui permet le diagnostic positif par la présence de gaz du rein du parenchyme rénal, des cavités excrétrices ou des espaces péri-rénaux. Les attitudes thérapeutiques divergent entre traitement chirurgical, drainage percutané et traitement conservateur.

Conclusion: Cette observation illustre la place du traitement médical au stade précoce de la maladie.

Mots clés: Diabète, pyélonéphrite emphysémateuse, traitement médical.

Anémie au cours de la maladie rénale chronique a abidjan

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CHU Yopougon

Objectif: Le but de ce travail était de déterminer la prévalence de l'anémie chez l'insuffisant rénal afin d'en améliorer la prise en charge pré-dialyse. **Méthodes:** Nous avons inclus tous les patients âgés de plus de 15 ans, ayant une maladie rénale chronique selon les critères du KDOQI 2012, non traité par hémodialyse et ayant une anémie définie par un taux d'hémoglobine inférieure à 12g/dl. **Résultats:** Nous avons colligé durant la période allant du 1er Juillet 2014 au 30 Juin 2015, 218 patients dont 110 femmes (50,5 %) et 108 hommes (49,5%). L'âge moyen des patients était de $47,22 \pm 14,94$ ans. et le taux d'hémoglobine moyen de $9,49 \pm 1,9$ g/dl. Les étiologies de la MRC étaient les néphropathies hypertensives (29,8%), les néphropathies glomérulaires (24,8%) suivies des néphropathies sur terrain VIH (13,3%). Les anémies sévères ont été plus observées dans les néphropathies glomérulaires et sur terrain VIH positif ($p=0,016$). La prévalence globale de l'anémie était de 42%. L'anémie a été observée à tous les stades de la maladie rénale chronique et 85,8% de nos patients qui étaient à un stade 3 KDOQI et plus. Le traitement était l'administration du fer par voie orale et la transfusion sanguine, l'EPO n'a été administré que chez 3,3% des patients. **Conclusion:** L'anémie en pré-dialyse est retrouvée chez 42% des malades en pré-dialyse. Elle est traitée avec du fer oral et la transfusion sanguine. La prise en charge de l'anémie doit être améliorée par l'administration de l'EPO comme le recommande les guidelines internationales telles que le KDOQI. L'utilisation des ASE passe par une politique nationale visant à rendre le coût accessible aux populations. **Mots-clés :** Anémie, pré-dialyse, VIH, transfusion sanguine.

Apport du GeneXpert dans le diagnostic de la tuberculose chez les hémodialysés chroniques au sud du Sénégal

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Objectif: L'objectif de ce travail était de montrer l'apport du GENEXPERT dans le diagnostic de la tuberculose chez les hémodialysés chronique. **Patients et méthode:** Il s'agit d'une étude prospective longitudinale sur quatorze(14) mois, incluant les patients en hémodialyse périodique au centre d'hémodialyse de Ziguinchor présentant des symptômes cliniques et /ou paracliniques en faveur d'une tuberculose. **Résultats:** Sur 30 patients hémodialysés chroniques durant la période d'étude, 7 cas de tuberculose étaient colligés, soit une prévalence de 23,33%. Il y avait 5 hommes et 2 femmes (5H/2F). L'âge moyen était de 37 ans [18-67ans]. Le premier signe révélateur était une fièvre inexplicable et des sueurs profuses dans 6 cas (85,8%). Les autres signes d'imprégnation: altération de l'état générale, l'anorexie, l'asthénie sont quasi constants chez tous nos patients. La radiographie pulmonaire était contributive dans 1 cas montrant une opacité réticulonodulaire apicale gauche. L'intradermoréaction (IDR) à la tuberculine réalisée chez tous nos patients était revenue négatif. La recherche de BAAR à l'examen direct de l'expectoration et à la culture sur milieu de lowenstein s'est révélée positive une seule fois. Le GENEXPERT a confirmé l'atteinte tuberculeuse dans 6 cas (1 cas dans le liquide de ponction pleurale, 2 cas dans le liquide de ponction d'ascite et 3 cas dans le liquide de ponction pleurale et péritonéale). Les localisations extra-pulmonaires étaient trouvées dans 6 cas (85,8%) : péritonéale dans 2 cas soit 28,6%, pleurale dans 1cas et multifocale (pleurale et péritonéale) dans 3 cas. L'évolution chez nos patients était favorable dans 5 cas (71,4%) et défavorable dans 2cas (décès). **Conclusion:** Le GENEXPERT demeure un outil de diagnostic de certitude et permet de diminuer le taux de mortalité souvent imputé au retard diagnostic. **Mots clés :** Tuberculose, hémodialyse, Genexpert, Ziguinchor

Bilan Phosphocalcique chez les patients hémodialysés de l'hôpital national Donka à Conakry

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Objectifs: Evaluer le niveau d'atteinte des objectifs de prise en charge des troubles phosphocalcique de la NFK/KDOQI chez les patients hémodialysés. **Matériel et Méthodes:** L'étude s'est déroulée au Centre National d'hémodialyse de l'Hôpital National Donka sur une période de trois mois allant d'avril à juillet 2012. Cette étude était transversale, nous avons effectué le dosage des marqueurs du métabolisme phosphocalcique (Ca, P et PxCa) par les méthodes biochimiques courantes chez 42 patients hémodialysés chroniques. **Résultats:** L'âge moyen était de 48±15,53 ans. Le sexe ratio était de 1,21. La durée moyenne en dialyse des patients était 16±6,17 mois. La calcémie moyenne était de 9,75±0,83 mg/dl ; la phosphorémie moyenne était de 4,22±1,14 et le taux moyen du produit phosphocalcique 41,08±11,33. Cinquante quatre pourcent des hémodialysés avaient une calcémie dans la valeur cibles des recommandations KDOQI ; 45,25% pour la phosphorémie et 90,48% le produit phosphocalcique. **Conclusion:** Un pourcentage faible de patients a atteint les valeurs cibles des recommandations de la NKF K/DOQI pour les troubles phosphocalcique de la MRC. Ces constatations soulignent les difficultés auxquelles nous nous heurtons constamment dans la prise en charge du métabolisme phosphocalcique chez les patients en hémodialyse. **Mots clés:** Calcémie, Phosphorémie, hémodialyse.

Recherche d'auto-Anticorps anti- érythrocytaires au cours de l'insuffisance rénale au CHU du Point-G-Bamako

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Objectifs: De rechercher une éventuelle auto-immunisation par la mise en évidence d'auto-anticorps anti-érythrocytaires. **Méthodologie:** Cette étude a inclus 54 insuffisants rénaux, âgés de 15ans à 87 ans, hospitalisés entre janvier 2013 et juin 2015 pour une anémie clinique et biologique (taux d'hémoglobine). La détection et l'identification des auto-anticorps anti-érythrocytaires ont été faites par le test de coombs direct, test de référence qui a permis de rechercher les auto-anticorps fixés sur les globules rouges des malades à partir d'antiglobuline polyspécifique et monospécifique anti-IgG et anti-C3d. **Résultats:** Globalement 48,1% des patients de notre série ont produit des auto-anticorps anti érythrocytaires révélés par le test de coombs direct. L'anémie était sévère (taux d'Hb<8g/dl) et régénérative respectivement dans 44,7% et 50% des patients ayant produit des auto-anticorps anti-érythrocytaires. L'insuffisance rénale était à caractère aigu dans 35,2% et chronique dans 64,8% des cas. Transfusion sanguine (46,40%), l'infection bactérienne, Lupus (75%), l'hépatite B (50%), myélome (7,5%). **Conclusion:** Il serait alors souhaitable d'inclure dans le bilan biologique de l'insuffisance rénale la détection des auto-anticorps anti-érythrocytaires qui pourraient aggraver l'anémie chez les patients. **Mots clés:** Anémie , hémolyse ,insuffisance rénale, Auto- Anticorps, test de coombs direct.

Evaluation des paramètres sociodémographiques, cliniques et biologiques des hémodialysés chroniques de cinq (5) ans et plus.

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Objectifs: Il s'agissait d'évaluer les paramètres socio-clinique, clinique et biologique des hémodialysés chroniques après 5 ans et plus d'hémodialyse périodique. **Matériels et Méthode:** Il s'agissait d'une étude rétrospective et descriptive incluant tous les hémodialysés chroniques dont l'ancienneté en hémodialyse est d'au moins cinq (5) ans. Ainsi nous avons analysé leurs données Sociodémographiques, cliniques et para cliniques. **Résultats:** Sur les trente-cinq (35) hémodialysés depuis cinq ans (5) et plus, seulement vingt (20) ont accepté d'être évalués. L'âge moyen est de $49,3 \pm 13,14$ ans avec un sex ratio 1,5. L'ancienneté en hémodialyse est de $7 \pm 1,42$ ans. Quatorze patients (73,7%) ont leur premier abord vasculaire toujours fonctionnel. L'HTA dialytique est présente dans 40% des cas. L'atteinte cardiaque est présente chez 70%, il s'agissait d'une cardiomyopathie hypertrophique (50%) et d'une cardiomyopathie dilatée (40%). L'hyperparathyroïdie secondaire est présente dans 70% avec déminéralisation osseuse dans 90% des cas. La fréquence de l'anémie est de 90% des patients et 80% ont un taux d'hémoglobine en dessous de la cible des recommandations de KDIGO. La dénutrition, l'infection à virus d'hépatite B, l'hépatite C, et la douleur chronique sont présentes dans respectivement 35%, 10%, 20% et 80% des cas. Soixante pourcent n'ont pas d'activité sexuelle. **Conclusion:** Le devenir des hémodialysés chroniques après une longue durée en dialyse est caractérisé par la fréquence des complications nécessitant une prise en charge adaptée. **Mots clés:** Evaluation, hémodialyse, calcémie .

Incidence et prévalence des abords vasculaires chez les hémodialysés chroniques au Sénégal

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Objectif: Le but de cette étude est de faire un état des lieux des abords vasculaires chez tous les hémodialysés du Sénégal. **Patients et Méthodes:** Il s'agissait d'une étude prospective, multicentrique, transversale allant du 01 juin au 30 juin 2016 réalisé dans tous les centres d'hémodialyse publiques et privés du Sénégal. Etaient inclus, tout patient présentant une maladie rénale chronique au stade V, traité par hémodialyse depuis au moins 3 mois. **Résultat :** 412 patients ont été colligés. L'âge moyen était de 47.76 ans [11-85 ans]. Il y avait 207 femmes (50,2%) et 205 hommes (49,8%). Le sex-ratio était de 0,99. Les néphropathies initiales les plus fréquentes étaient la néphroangiosclérose dans 271 cas (41,50%) suivie par les néphropathies de cause inconnue dans 135 cas (32,76%). La durée moyenne en hémodialyse était de 36.95 mois. Les premières séances d'hémodialyse ont été effectuées sur un cathéter veineux central chez 378 patients (91.75%). Deux cent quatre vingt six patients (69.40%) avaient comme abord vasculaire actuel une fistule artério-veineuse (FAV) et 126 patients (30,60%) dialysaient sur un cathéter veineux central. Soixante dix neuf patients (62,7%) avaient un cathéter tunnélisé, 26 patients (20,6%) avaient un cathéter jugulaire simple et 21 patients (16,7%) avaient un cathéter fémoral double lumière. La durée moyenne d'utilisation des cathéters veineux centraux (CVC) était de 7.66 mois [1-72 mois]. L'infection était la seule complication des CVC retrouvée chez 5 patients (3,97%). La FAV radiale a été la FAV la plus fréquente dans 165 cas (57,70%) suivie de la FAV céphalique dans 78 cas (27,30%) et de la FAV Basilique dans 37 cas (12,90%). La survie moyenne des FAV était de 30.54 mois [1-207 mois]. Des complications de FAV ont été retrouvées chez 73 patients (21.3%), dominées par les thromboses chez 38 patients (52,1%) et les anévrysmes chez 22 patients (30,1%). **Conclusion:** L'utilisation de cathéter veineux central pour hémodialyse en première intention reste fréquente au Sénégal d'où l'intérêt de former les chirurgiens des hôpitaux régionaux à la confection des fistules artério-veineuses. **Mots clés:** Abord vasculaire, hémodialyse, Sénégal

Qualité de vie et les facteurs associés : étude observationnelle à propos de 64 cas d'hémodialyses chroniques au Sénégal

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Objectifs: Evaluer la Qualité de Vie Liée à la Santé (HRQoL) des patients hémodialysés dans 3 centres semi-urbains du Sénégal. Déterminer les facteurs sociodémographiques, cliniques et paracliniques associés à la Qualité de Vie liée à la Santé de ces derniers. **Méthodes :** A partir d'une étude observationnelle, transversale, descriptive et analytique déroulée sur 2 mois entre le 1er Mars et le 30 Avril 2016, les dossiers de patients hémodialysés régulièrement depuis au moins 3 mois, et âgés d'au moins 18 ans ont été analysés. La qualité de vie liée à la santé a été évaluée en interrogeant les patients à partir du questionnaire KDQOL SF 1.3 version Française. **Résultats:** Soixante quatre patients ont été inclus, soit un taux de participation de 81%. Concernant le questionnaire KDQOL, les patients avaient le même vécu du retentissement de la maladie rénale chronique, indépendamment de leur lieu de dialyse. La moyenne d'âge était de 43,3 ± 19,9 ans. Plus d'un patient sur 5 résidait à plus de 30 km de son centre de dialyse. Les scores moyens les plus bas concernaient les dimensions « Statut Professionnel » (28,9) et « Fardeau de la maladie rénale » (33,9). Les scores les plus élevés concernaient les domaines « Encouragements reçus par l'équipe de dialyse » (88,6) et « Qualité de l'entourage » (86,7). Les femmes avaient un score significativement meilleur (93,8) que les hommes (83,3), concernant la dimension « Encouragements reçus de l'équipe de dialyse » (p=0,02). Les patients mariés avaient, comparés aux non mariés, des scores significativement inférieurs, concernant les dimensions « Qualité de l'activité sexuelle » (55,8 vs 96,1 ; p= 0,006) et « Satisfaction du patient » (74,8 vs 87,2 ; p= 0,01). Les patients qui avaient une diurèse résiduelle ≤ 500 ml/ jour avaient des scores significativement inférieurs, que les autres, dans les dimensions « Symptômes/Problèmes » (73,3 vs 81,5 ; p= 0,03). **Conclusion:** L'information et un soutien psychologique adaptés sont importants pour améliorer la qualité de vie des hémodialysés au Sénégal. **Mots clés:** Hémodialyse, qualité de vie, Sénégal

Connaissances et pratiques des infirmiers d'hémodialyse au Cameroun sur la prévention de la transmission du virus de l'hépatite B en hémodialyse.

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Objectifs: Le but de cette étude est d'évaluer les connaissances et pratiques du personnel infirmier sur la prévention de transmission du VHB en hémodialyse. **Méthodologie :** C'est une étude transversale descriptive menée dans 6 centres d'hémodialyse du Cameroun, avec échantillonnage consécutif, données collectées grâce à un questionnaire comportant 32 items analysées sur Epi info 7.0. **Résultats:** 39 personnels ont été interrogés en majorité des IDE. L'ancienneté moyenne était de 5,9ans. 75% ont eu une formation <3mois aux soins en dialyse. Les connaissances sur le risque infectieux en dialyse étaient globalement bonnes, notamment la nécessité de vaccination des patients et du personnel, mais seuls 46,12% des soignants vaccinés. La connaissance des mesures de précautions standards lors des soins était insuffisante et les pratiques mauvaises, notamment les gestes en cas d'AES. Concernant l'hygiène lors des soins aux patients, la séquence de branchement du patient était bien connue, mais 46,5% savaient que les porteurs de VHB devaient être avoir des machines et des personnels dédiés. Les pratiques étaient moyennes (changement de gants, lavage des mains, recapuchonage des aiguilles). Au sujet de la désinfection des surfaces de travail et générateurs, les connaissances étaient globalement moyennes de même que les pratiques. **Conclusion:** Le personnel infirmier des centres d'hémodialyse a des connaissances insuffisantes sur les mesures de prévention de transmission du VHB en hémodialyse, résultant à des mauvaises pratiques. Nous recommandons d'organiser des formations et recyclages sur l'hygiène et soins aux patients en hémodialyse, de faire vacciner le personnel d'hémodialyse et le respect strict des mesures de prévention de transmission du VHB en hémodialyse. **Mots clés:** Hémodialyse – VHB – connaissances – pratique

Contribution à l'étude de l'endocardite infectieuse chez les hémodialysés chroniques : à propos de cinq (05) cas colligés à Dakar

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Objectif: Déterminer la prévalence et d'étudier les particularités diagnostiques et thérapeutiques de l'endocardite infectieuse (EI) chez les HDC de Dakar. **Patients et méthodes :** il s'agissait d'une étude rétrospective des patients hémodialysés chroniques colligés dans les différents centres de dialyses de Dakar, hospitalisés pour EI. Sur une période allant de janvier 2010 à novembre 2016. **Résultats:** nous avons rapporté 5 cas dont 3 femmes et 2 hommes. L'âge moyen était de 36,4± 14,89 ans avec des extrêmes de 18 et 60 ans. Les antécédents étaient marqués par l'hypertension artérielle dans 3 cas et une valvulopathie rhumatismale dans 1cas. Tous les patients avaient eu en moyenne 2,6 abords vasculaires d'une durée moyenne de 6,2 mois chacun dont un avait eu un cathéter tunnelisé d'une durée d'1 an. Au moment du diagnostic 2 des patients avaient des FAV natives et 3 cathéters jugulaires droits. L'EI a été évoquée chez nos patients devant : La fièvre, l'altération de l'état général, la dyspnée avec souffle cardiaque systolique. Elle a été confirmée par l'hémoculture et l'échographie trans-thoracique. L'hémoculture était positive dans 4 cas. Le germe le plus trouvé était le staphylococcus (aureus ; saprophyticus) dans 2 cas suivie du Streptococcus hemolyticus et l'Entérocooccus spp. A l'ETT les végétations sur valves tricuspides étaient présentes dans 2 cas, suivies des valves Aortiques et une tricuspide associée à une mitrale. Tous nos patients avaient reçu une antibiothérapie adaptée. Aucun de nos patients n'a reçu un traitement chirurgical. Les complications observées étaient : la spondylodiscite dans un cas, l'AVC dans 2 cas, l'insuffisance cardiaque, le choc septique. La durée moyenne d'hospitalisation était de 19,2 avec une survie à 30 jrs de 40%. Le pronostic chez nos patient étaient mauvais 3 décès et un taux de mortalité à 60% à J 30. **Conclusion:** l'EI chez l'HDC à un très mauvais pronostic à court et à long terme sa prise en charge doit être axée sur la prévention par une aseptie rigoureuse et une intervention chirurgicale précoce. **Mots clés:** hémodialysé chronique, endocardite infectieuse, fièvre, Dakar.

L'hyperferritinémie en hémodialyse chronique : profil épidémiologique et étiologique

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Objectif: Le but de ce travail était de déterminer la prévalence des hyperferritinémies et d'en rechercher les étiologies chez nos patients hémodialysés chroniques. **Patients et méthodes:** Il s'agissait d'une étude transversale, descriptive et analytique qui s'était déroulée du 01 au 31 décembre 2016. Elle avait inclus tous les hémodialysés chroniques depuis au moins 3 mois au CHU Aristide Le Dantec de Dakar ayant une ferritinémie supérieure à 200 µg/l chez la femme avant la ménopause et 300µg/l chez l'homme et la femme ménopausée.

Resultats: Les hémodialysés chroniques étaient au nombre de 78. La ferritinémie avait été dosée chez 49 patients dont 36 avaient une hyperferritinémie soit une prévalence de 73,5%. Cinquante-trois % des patients avaient une ferritinémie > 500 µg/L. L'âge moyen était de 52,83 ±15,29 ans avec un sex ratio de 0,5. L'ancienneté moyenne en hémodialyse était de 80,9 mois (17-183 mois). Vingt-cinq % des patients avaient un IMC <18,5 kg/m² et 22,2% un GNRI 500 µg/L et 500 µg/L et, la polytransfusion en était la cause la plus fréquente.

Première séance d'hémodialyse réalisée en urgence, à propos de 69 cas

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Objectif: L'objectif de cette étude était de préciser les caractéristiques épidémiologiques, cliniques, biologiques et évolutives des patients dialysés en urgence. **Matériels et méthode:** Il s'agissait d'une étude prospective de janvier à mai 2016 qui a concerné 69 patients du centre de dialyse du service de néphrologie du CHU de Yopougon. **Résultats:** L'âge moyen était de 38,6±14,5 ans (13 – 80) avec 58% d'hommes. 56,5% des patients étaient hypertendus, 82,6% insuffisants rénaux chroniques, 17,4% VIH. La clinique était dominée par un syndrome œdémateux (47,8%), un trouble de la conscience (36,2%), une déshydratation extracellulaire (14,5%) et la pression artérielle moyenne était de 155/96 mmHg. Sur le plan biologique, l'anémie était retrouvée dans 94,2% nécessitant une transfusion de culot globulaire en per-dialyse 40,6%, un syndrome inflammatoire (68,1%), une hyponatrémie (63,7%) et une hyperkaliémie (40,6%). Les indications de dialyse étaient l'encéphalopathie urémique (42%), l'œdème aigu pulmonaire (23,2%) et l'anurie (17,4%). La voie d'abord était le cathéter chez tous les patients. La durée d'hospitalisation moyenne était de 16,5±8,8 jours avec un nombre moyen de séances de 3,5±1,7. L'évolution était marquée par le maintien en dialyse chronique chez 73,9%, la récupération de la fonction rénale (14,5%) et le décès (11,6%). Les patients décédés étaient plus âgés (50,6 ans Vs 37 ans, p=0,012). Les taux d'hémoglobine plus élevé (9,3 g/dl Vs 7,6 g/dl, p=0,01) et de créatinine plus bas (179,4 mg/l Vs 248,5 mg/l, p=0,039) étaient associés à la récupération de la fonction rénale. **Conclusion:** La dialyse en urgence est le mode de démarrage du traitement chez de nombreux patients. **Mots clés:** Hémodialyse, Urgence, Insuffisance rénale

Anomalies échocardiographiques chez l'insuffisant rénale chronique

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Objectifs: Nous nous proposons de déterminer la prévalence des différentes anomalies cardiaques objectivées à l'ETT chez une population d'IRC en pré-dialyse et de dégager les facteurs de risque associés aux principales atteintes. **Matériels et Méthodes :** Il s'agissait d'une étude rétrospective descriptive et analytique réalisée sur 2 ans dans le service de Néphrologie du CHU de Yopougon incluant 104 patients IRC jamais dialysés. Les données sociodémographiques, cliniques, biologiques et échocardiographiques ont été recueillies à partir des dossiers médicaux d'hospitalisation. **Resultats:** L'âge moyen était de 48,9±14,5 ans avec un sex ratio de 1,7 en faveur des hommes. Les FDRCV étaient dominés par l'HTA (77,9%), la rétention hydrosodée (67,3%), une intoxication alcool-tabagisme (65,4%) et le diabète (20,2%). L'insuffisance cardiaque globale (51,9%) et l'œdème aigu pulmonaire (14,6%) dominaient le tableau clinique. Les anti-HTA prescrits étaient diurétiques (79,8%), inhibiteurs calciques (77,9%) et IEC/ARA2 (72,1%). A la biologie nous avons retrouvé l'anémie (100%), CRP positive (94,2%), hypocalcémie (72,1%) et hyperphosphatémie (70,2%). L'ETT a mis en évidence les cardiomyopathies dilatée (62,5%), hypertrophique (33,7%) et la péricardite (22,1%). Toutes les cavités et parois étaient concernées par la dilatation et l'hypertrophie dans des proportions variables. La FEVG est conservée chez 71,2% des patients avec hypokinésie globale (26%). **Conclusion:** Les anomalies échocardiographiques chez l'IRC sont très fréquentes à type de dilatation et d'hypertrophie survenant chez des patients avec HTA, rétention hydrosodée, anémie et troubles phosphocalciques.

Profil épidémiologique de la maladie rénale chronique chez le sujet âgé en consultation de néphrologie au CHU SO du Togo

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Objectif: Le but de cette étude était de préciser les aspects épidémiologiques de la maladie rénale chronique (MRC) chez les patients âgés de plus de 65 ans dans un hôpital tertiaire du Togo. **Matériel et méthode :** Il s'agissait d'une étude prospective descriptive réalisée sur une période de 09 mois allant du 02 Janvier 2015 au 02 octobre 2015. Tout patient âgé de 65 ans et plus atteint de maladie rénale chronique était inclus. Le recueil des données s'est fait en continu à partir du dossier médical rempli par le médecin néphrologue. Les patients étaient vus au minimum trois fois par le néphrologue afin d'asseoir le diagnostic de MRC. La MRC a été défini par la présence, pendant plus de 3 mois, d'anomalies rénales biologiques, morphologiques ou histologiques et ou un DFG inférieur à 60ml/min/m². Le DFG a été calculé selon l'équation de Modification of Diet in Renal disease (MDRD) simplifiée. Nous avons regroupé les patients en trois groupes en fonction des revenus économiques et en fonction des tranches d'âge. **Résultat:** Pendant la période d'étude 33 patients ont été inclus. La prévalence hospitalière de la MRC chez le sujet âgé était de 13,04%. Le sexe ratio était de 1,5. La moyenne de créatinine de nos patients était de 62,4±28,2mg/l avec un DFG moyen de 17,9±11,9. L'index de masse corporel moyen était de 26,7±7,9. Les patients présentaient majoritairement une maladie rénale chronique stade 5 et 4 soit respectivement 54,5 % et 27,3% de la population totale. Tous les patients présentaient des troubles phosphocalciques et une anémie. La proportion des patients présentant des complications croît avec la sévérité de la MRC. La tranche d'âge de 65-70 ans est la plus représentée dans tous les stades de la MRC. La néphropathie vasculaire était majoritaire à 60,6% suivie de la néphropathie glomérulaire en proportion égale avec les néphropathies classées indéterminées à 15% des cas. Aucun patient n'a bénéficié d'un traitement par hémodialyse. Les bloqueurs du système rénine angiotensine étaient les médicaments les plus utilisés pour le traitement antihypertenseur. La supplémentation martiale et calcique était quasi systématique chez tous les patients. Le taux de mortalité était de 18,2% pendant notre période d'étude. **Conclusion:** La MRC du sujet âgé touche la classe de personne la plus défavorisée avec une forte mortalité. Cette étude hospitalière doit être élargie à la population générale. Il faudrait dans ce contexte investir dans la prévention.

Néphropathie diabétique au CHU Ibn Sina: épidémiologie and facteurs

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Objectif: De déterminer les facteurs de risque (FDR) liés à l'insuffisance rénale chronique chez le diabétique type 2 et d'apprécier l'évolution de cette d'insuffisance rénale chronique (IRC) après une prise en charge néphrologique. **Patients et méthodes :** Notre étude observationnelle s'étale sur une période de 15 ans (2000-2014) incluant tous les patients diabétique type 2 ayant une néphropathie diabétique suivie en consultation de néphrologie au sein du CHU Ibn Sina de Rabat. Nous avons réparti ces patients en 2 groupes : avec et sans IRC. Nous avons analysé les différents paramètres cliniques, biologiques et évolutifs des patients avant l'instauration des mesures de néphroprotection et après un an de suivi. **Résultats:** parmi les 1396 patients colligés dans notre étude, 890 étaient au stade d'IRC (63.7%) tandis que 506 patients présentaient une néphropathie diabétique sans IRC (36.3%). L'âge moyen de nos patients était de 62.22 +/- 11 ans. Le sex-ratio était de 1.25 A l'admission, le diabète était déséquilibré chez 56.6% des patients. Seul l'âge avancé, le sexe masculin, l'anémie et l'hyperuricémie représentaient des FDR liés à l'IRC en analyse multivariée. Après une prise en charge néphrologique et un suivi d'une année on note une baisse significative de l'excrétion urinaire d'albumine dans les deux groupes

Ainsi qu'une stabilisation de l'insuffisance rénale avec un déclin de 1.6ml/min/an dans le groupe ayant l'IRC.

Discussion : la néphropathie diabétique est l'une des premières causes d'entrée en dialyse dans le monde. Elle constitue un marqueur de risque cardio-vasculaire. L'intervention précoce surtout chez les sujets à risque est déterminante.

Conclusion: le dépistage précoce de la ND avec une prise en charge multidisciplinaire permettrait d'améliorer le pronostic en ralentissant le plus possible la progression de la néphropathie diabétique

Causes de décès chez les insuffisants rénaux chroniques en Guinée

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Objectifs: Déterminer les causes de décès chez les insuffisants rénaux chroniques hémodialysés ou non.

Malades et Méthodes: Notre étude était rétrospective allant de 2010 à 2014 portant sur les dossiers des patients décédés en néphrologie et en hémodialyse. En effet sur 817 dossiers, 126 cas de décès étaient enregistrés. Parmi eux, 46 hémodialysés et 80 non hémodialysés avec différents stades de leur maladie rénale. Les paramètres pris en compte étaient l'âge, le sexe, la néphropathie initiale, les comorbidités, le traitement conservateur, certaines données de l'hémodialyse (abord vasculaire, dose hebdomadaire). **Résultats:** Le taux de mortalité était de 15%, l'âge moyen était de 43 ans, les hommes étaient au nombre de 66 (52%) et les femmes au nombre de 60 (48%). Selon le mode d'admission les patients étaient programmés (3%) ; reçus en urgence (13%) ; référés (84%). Les principales comorbidités associées étaient une insuffisance cardiaque (18%) ; une infection à VIH (9%) et un accident vasculaire cérébral (2%). La néphropathie initiale était considérée probablement glomérulaire (42%) ; vasculaire (36%) ; diabétique (16%) et tubulo-interstitielle (6%). Le traitement conservateur a été appliqué chez les 80 patients décédés non dialysés ; et 46 étaient des hémodialysés. Les causes de décès étaient dans le premier groupe, métabolique (14%) ; infectieuse (19%) et cardiovasculaire (67%). Chez les hémodialysés décédés, 35 cas (76%) étaient porteurs d'un cathéter veineux contre 11 cas (24%) de fistule artério-veineuse. Dans ce groupe les séances étaient en majorité de 4h deux fois par semaine. Les causes de décès étaient infectieuse (33%) et cardiovasculaire (50%). **Discussion:** Notre étude met l'accent sur un besoin de développer les moyens de prise en charge des patients en insuffisance rénale chronique, ceci en nombre à travers notre pays mais aussi en qualité. **Conclusion:** Le nombre de décès chez les insuffisants rénaux chroniques reste élevé malgré le recours à l'hémodialyse qui reste d'accès limité et de qualité moindre par rapport aux normes recommandées. **Mots clés:** causes de décès, insuffisance rénale chronique

Profils épidémiologique, clinique et évolutif des hemodialysés au Centre Hospitalier Regional El hadj Ibrahima Niass de Kaolack

Adama Kama, Ahmed Tall Lemrabott, Abdou Niang, Boucar Diouf

CHU Aristide le Dantec

Objectif: Décrire les profils épidémiologique, clinique et évolutif des hemodialyses au Centre Hospitalier Regional El hadj Ibrahima Niass de Kaolack. **Patients et Methodes:** Il s'agit d'une étude descriptive de 12 mois s'étendant d'avril 2014 à mars 2015 et incluant tous les patients hémodialysés au CHREIN de Kaolack. L'unité dispose de 7 générateurs fonctionnels. La région de Kaolack est la quatrième la plus peuplée au Sénégal, une zone de carrefour routier et le centre du bassin arachidier. **Resultats:** Après un an d'activité, l'unité avait reçu 75 patients avec un sex ratio de 1,14. L'âge moyen des patients était de $42,68 \pm 14,38$ ans. Soixante-deux pour cent des hémodialysés habitaient dans la région de Kaolack. La néphroangiosclérose bénigne, la glomérulonéphrite chronique, les NTIC étaient les principales étiologies. Cinquante six pour cent des patients avaient débuté leurs premières séances à Kaolack. Dix huit virgule soixante sept pour cent avaient une fistule artérioveineuse. La durée moyenne en hémodialyse des patients était de 183 jours. Trente-huit pour cent des patients étaient dénutris. Tous les patients étaient anémiés et 86% étaient transfusés. Quarante-neuf pour cent des patients étaient mis sous fer injectable et sous érythropoïétine d'une manière irrégulière. Quarante-deux virgule dix pour cent des patients avaient une hypocalcémie et 50%, une hyperphosphorémie. Un patient avait une hyperparathyroïdie secondaire et mis sous calcimimétique. Soixante-trois virgule quinze pour cent des patients étaient mis sous carbonate de calcium, deux patients sous chélateurs non calciques du phosphore et deux sous dérivé vitaminique D en per os. L'Ag HBs était positif chez 20,41% des patients. Un patient était VIH 1 sous traitement. La recherche d'anticorps anti VHC par test rapide était négative chez les quarante-neuf patients dépistés. Les facteurs de risques cardiovasculaires retrouvés étaient l'HTA (61, 33% des cas), le diabète non équilibré (2,66% des cas) et l'hypercholestérolémie LDL (75% des cas). Soixante-huit pour cent des patients avaient un KT/V moyen hebdomadaire supérieur à 1,2. Cinquante-cinq pour cent de décès étaient enregistrés en hémodialyse. L'anémie, le coma urémique et le sepsis ont été les principales causes de décès avec respectivement 21,95%, 17,07% et 17,07%. **Conclusion:** L'ouverture d'une unité d'hémodialyse est une aubaine pour la population kaolackoise et environnante. L'âge de nos patients est relativement jeune. Cependant la capacité d'accueil est insuffisante. L'extension du centre d'hémodialyse avec un plateau technique et des ressources humaines adéquates, l'accessibilité aux examens complémentaires et aux traitements de base seront d'un grand apport.

Complications vasculaires, niveaux de fonction rénale et facteurs de risque cardiovasculaire dans une population semi-rurale du Sénégal

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Objectifs: Etudier les relations entre les complications vasculaires, les niveaux de fonction rénale et les facteurs de risque cardiovasculaire dans la population de Guéoul. **Patients et méthodes :** Il s'est agi d'une étude transversale menée du 01 Novembre 2012 au 10 Décembre 2012 à Guéoul. Tous les individus âgés d'au moins 35 ans, résidants dans cette commune depuis 6 mois au moins et ayant accepté de participer à l'étude (à l'exclusion des femmes enceintes, des sujets présentant un syndrome infectieux, une déshydratation ou une rétention aigue d'urines) chez qui un dosage de la créatininémie, une mesure de l'index de pression systolique et une échographie-Doppler carotidienne étaient réalisés ont été inclus. **Résultats:** 1411 sujets ont été inclus. L'âge moyen était de 48,45±12,68 ans (extrêmes : 35 et 95 ans) avec un sex-ratio de 0,34. La prévalence de la maladie artérielle périphérique (MAP) était de 28,56%. Celle de l'athérosclérose carotidienne était de 20,91% avec 18,36% des sujets qui avaient une augmentation de l'épaisseur intima média carotidienne et 6,80% des sujets qui avaient des plaques carotidiennes. La proportion de sujets qui avaient une athérosclérose carotidienne et une MAP augmentait avec le déclin du DFG. Il existait une corrélation statistiquement significative entre les niveaux de fonction rénale et l'athérosclérose carotidienne ($p=0,012$) ainsi que la MAP ($p<0,001$). A l'analyse multivariée, l'âge ≥ 65 ans ($p=0,020$), l'HTA ($p=0,000$), le tabagisme ($p=0,040$) et l'IRC ($p=0,011$) étaient associés à l'athérosclérose carotidienne. **Conclusion:** La prévalence des complications vasculaires augmente crescendo avec le déclin du DFG dans la population générale de Guéoul. **Mots clés:** complications vasculaires, fonction rénale, Guéoul, Sénégal

Depistage des anomalies renales chez les patients vivant avec le VIH à Brazzaville (REP CONGO)

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Objectif: Déterminer la prévalence de la maladie rénale ainsi que les facteurs de risque associés. **Patients et Méthodes:** Il s'est agi d'une étude multicentrique, transversale, descriptive et analytique sur une durée de 4 mois réalisée dans les services de gastro-entérologie, maladies infectieuses, pneumologie du CHU de Brazzaville et aux 2 centres de traitement ambulatoire de ladite ville. Ont été inclus les patients vivants avec le VIH âgés de plus de 15 ans, suivi régulièrement depuis au moins de 6 mois et ayant un comptage CD4. Tous les patients avaient bénéficié d'un examen physique complet, de bandelette urinaire, de la créatininémie, d'une glycémie à jeun, d'un bilan lipidique. **Résultats:** L'incidence de la maladie rénale était de 25% sur les 304 patients enquêtés. L'âge moyen des individus présentant une maladie rénale était de 44 ans $\pm 1,5$ ans. 72,36% étaient des femmes avec un sex ratio de 0,38. Parmi les patients présentant une maladie rénale, 13,49% avaient une protéinurie ; la leucocyturie était présente chez 1,98% et l'hématurie chez 0,99%. Selon la formule du MDRD 15,78 % patients avaient une insuffisance rénale. Quatre-vingt-dix-sept pourcent des patients étaient sous ARV de première ligne et 2,63% prenaient celui de deuxième ligne. Le nombre bas de CD4 c'est-à-dire inférieur à 200cells/mm³ ($p=0,024$) et la co-infection VIH/VHC ($p=0,029$) ont été des facteurs corrélés à la maladie rénale. **Conclusion:** Au Congo, la maladie rénale reste inconnue. Une stratégie de prévention primaire précoce et durable est nécessaire. **Mots clés:** anomalies rénales, patients vivants avec le VIH.

Connaissances, Attitudes et Pratiques du personnel de santé devant une élévation de la créatininémie chez le PvVIH

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Objectif: Evaluer le niveau de connaissances, identifier les attitudes et les pratiques des personnels des centres de traitement des PvVIH, devant une élévation de la créatininémie. **Méthode :** Etude transversale descriptive de Novembre 2016 à Janvier 2017 auprès des praticiens de 10 centres de prise en charge des PvVIH. A l'aide d'un questionnaire préconçu, les praticiens ont été interrogés sur les atteintes rénales liées au VIH, au traitement antirétroviral ainsi que leurs attitudes et pratiques devant une élévation de la créatinine.

Le niveau de connaissance était évalué selon les critères pré-établis: Mauvais, Insuffisant, Moyen et Bon. Les attitudes évaluées selon :juste, approximative, erronée et néfaste. L'analyse des pratiques établie en 3 niveaux :néfaste, inadéquat, adéquat. **Résultats:** Nous avons inclus 45 praticiens dont 22 médecins généralistes, 6 spécialistes et 17 infirmiers. Une expérience professionnelle de plus de 5 ans concernait 62,22% et 77,78 % avaient reçu une formation sur le VIH. Le niveau de connaissance du personnel était mauvais concernant la définition de l'insuffisance rénale (41,86% de bonne réponse), et les pathologies rénales liées au traitement antirétroviral (15,56% de bonne réponse). Par contre, il était bon pour l'identification des ARV qui ont une toxicité tubulaire (85% bonne réponse). L'attitude des praticiens était juste pour l'évaluation de la fonction rénale au moment du diagnostic (100%). Les pratiques étaient adéquates quant au dosage de la créatininémie au moment du diagnostic (77,27% de personnels). Notamment l'ensemble des spécialistes (100%) et seulement 59% des infirmières. Devant l'élévation de la créatininémie, les pratiques étaient adéquates concernant l'utilisation de la formule de COCKROFT et GAULT (62,22%), et la réalisation d'une bandelette urinaire (68,89%). Toutefois, la référence au néphrologue dans 31,11% lorsque le DFG < 30 ml/min/1,72m³ était inadéquate. Les pratiques sont néfastes devant la recherche de l'étiologie de la glucosurie chez le PvVIH sous Ténofovir, seulement 13,33% ont évoqué un syndrome de Fanconi. **Conclusion:** Les praticiens des centres de prise en charge des PvVIH ont un faible niveau de connaissances des atteintes rénales liées au VIH, toutefois, ils ont une attitude juste et des pratiques adéquates face à une élévation de la créatinine chez PvVIH

Profil des patients en IRA à N'Djamena: à propos de 36 cas

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Objectif: Décrire le profil des patients en IRA à N'Djamena. **Méthologie:** Il s'agissait d'une étude multicentrique, descriptive chez des patients présentant une IRA déroulée sur une durée de 12 mois au sein des services des urgences des 2 hôpitaux de N'Djamena. Étaient définis comme porteurs d'une IRA (critères de RIFLE), les patients présentant: Oligurie :débit urinaire< 400 ml/24h (< 0,5 ml/kg/h chez l'enfant) ou une anurie : débit urinaire 350 µmol/l ou diminution du DFG de 75%. **Résultats:** Sur 311 patients admis, 36 cas ont répondu aux critères d'inclusion soit une prévalence de 11,57%. L'âge moyen était de 34,46ans [7 et 80 ans]. Le sexe féminin prédominait avec 52,80% soit un sex ratio de 0,91. L'hypertension isolée était notée avec une proportion de 38,88%. La dyspnée représentait 41,66% des patients admis dans les services d'accueil des urgences. Dans notre série, 50% de nos patients présentaient une hyperthermie à l'admission. L'oligurie a été observée dans 41,70% des cas. Les œdèmes représentaient 33,33% des cas. L'IRA avec le critère « failure » représentait 58,34% (21/36), avec le critère « injury » 25% (9 cas) et le critère « risk » 16.66 (6 cas). Les IRA étaient organiques dans 83,34 % (30/36). On avait noté que 14 patients soit 38,8% présentaient un syndrome infectieux. Il y avait 6 patients qui présentaient (16,66%) une IRA obstructive, 5 patients (13,88%) une éclampsie, 4 patients (11,12%) une insuffisance hépatocellulaire, 3 patients (8,34%) une insuffisance cardiaque globale, 2 patients (5,56%) une déshydratation extracellulaire et 2 patients (5,56%) dont la cause est indéterminée. Tous les patients ont été hémodialysés. On avait noté que 10 patients soit 16,66% avaient récupéré totalement leur fonction rénale après un remplissage vasculaire et traitement étiologique. Nous avons noté un nombre de décès dans notre étude qui était de 44,44% (16/36). Le choc septique représentait la cause de décès la plus fréquente dans 50% des cas. **Conclusion:** La prévalence de l'IRA dans notre étude était de 11,57%. La prévention paraît la meilleure option thérapeutique pour éviter l'installation ou l'aggravation d'une IRA.

Primo-consultation néphrologique au centre Hospitalier Universitaire Aristide Le Dantec: a propos de 542 cas

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Objectif: Décrire le profil des patients adressés en consultation néphrologique et d'évaluer la prise en charge des patients au cours de la première consultation. **Méthodes:** Il s'agit d'une analyse rétrospective des dossiers médicaux des patients admis en première consultation de néphrologie au service de consultation externe du Centre Hospitalier Universitaire Aristide Le Dantec du 01/01/15 au 31/12/15. Les données recueillies étaient: la spécialité du médecin référent, le motif de consultation et les caractéristiques sociodémographiques, cliniques, paracliniques, thérapeutiques et évolutives des patients. **Résultats:** durant cette période, 542 nouveaux patients ont été reçus en consultation externe de néphrologie. L'âge moyen était de 53 ans ±16 avec un sex-ratio de 1,15. Les patients étaient adressés par un médecin généraliste dans 51,1%. Le motif de consultation était l'altération de la fonction rénale dans 70,1 %. La créatininémie moyenne était de 45,81±1,51mg/l. Le débit de filtration glomérulaire moyen était de 42,33±35,22 ml/min/1,73m². Nous avons noté une protéinurie pathologique dans 69,63%, une hématurie microscopique dans 29,41% et une leucocyturie dans 26,96% des cas. La ponction biopsie rénale avait mis en évidence une HSF dans 42%. L'insuffisance rénale aiguë était retenue dans 7,74% et l'insuffisance rénale chronique dans 64,02% des cas dont la majorité était au stade 5 de la MRC. Les antihypertenseurs étaient prescrits dans 74,63%. L'HD était débutée en urgence chez 21,08% des patients. L'évolution était marquée par une amélioration de la fonction rénale dans 20% et une dégradation chez 18,03% des patients. **Conclusion:** Les patients adressés en consultation de néphrologie sont souvent vus à un stade avancé de la MRC. A ce stade, le pronostic est aggravé par des facteurs de morbi-mortalité. L'instauration de programmes de dépistage précoce, de prévention et de formation de spécialistes garde ainsi son intérêt. **Mots-clés :** consultation, dépistage, insuffisance rénale, néphrologie, prévention.

Prévalence des facteurs de risque associés à la maladie rénale chronique dans les centres médicaux communaux de Conakry ;Guinée

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Objectif: Déterminer la fréquence des facteurs de risque associés à la MRC chez les patients en consultation de médecine générale dans les CMC de Conakry. **Patients et méthodes :** Du 20 octobre au 20 janvier , nous avons mené une étude prospective de type descriptif dans les 5 centres médicaux communaux de Conakry. Celle-ci portait sur tous les patients admis en consultation en médecine générale. Elle incluait tous les patients qui avaient consenti à l'enquête, et avaient présenté au moins un facteur de risque associé à la maladie rénale.

Résultats: Durant la période d'étude, 308 patients ont été vus, seulement 75 enquêtés sur la base d'un consentement libre. Parmi ceux-ci, 44% ont été inclus. Trente sur trente trois patients étaient au stade modéré et 3 sur 33 au stade d'IRC sévère. La protéinurie était présente chez plus de 50% des patients. **Conclusion:** Les facteurs de risque retrouvés chez nos patients étaient nombreux et méconnus par eux-mêmes. Ce qui fait de cette pathologie un réel problème de santé publique en Guinée. Seul son dépistage précoce permet de limiter sa progression vers l'IRC.

Profil des patients atteints d'insuffisance rénale aigue en rhumatologie a l'hôpital central de yaounde

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Objectif: Décrire les caractéristiques épidémiologiques des patients présentant une insuffisance rénale aigue hospitalisés dans le service de Rhumatologie de l'Hôpital Central de Yaoundé. **Méthodes :** Il s'agissait d'une étude rétrospective, menée de Janvier à Décembre 2016 à partir des dossiers des patients admis au service de Rhumatologie et présentant une insuffisance rénale. Pour chaque dossier inclus, les données épidémiologiques, cliniques, paracliniques et les facteurs de risque d'insuffisance rénale aigue étaient enregistrés. Les analyses ont été menées à l'aide de SPSS 19 et Epi Info 7. **Résultats:** Parmi les 93 dossiers sélectionnés, 14 présentaient une insuffisance rénale aigue (prévalence de 15,1 %). Le sex ratio était de 3/1 avec un âge moyen de 64,29 ± 16,2 ans. Les infections ostéo-articulaires représentaient 42,8% des admissions, suivis par les crises aiguës de goutte (21,4%). La prise de néphrotoxiques (AINS et phytothérapie) et le sepsis étaient respectivement retrouvés dans 71,4 % et 57,1% des cas. La moyenne des créatininémies initiales était de 27,24±12,9 mg/l. Par rapport à celle-ci, il y avait une baisse significative de 12,23±6,6 mg/l ($p < 0,001$) pour les créatininémies de contrôle. Les patients avaient totalement récupéré dans 78,6 % des cas avant la sortie. **Conclusion:** L'insuffisance rénale aigue est fréquente en Rhumatologie. La prise de néphrotoxiques était le facteur le plus souvent associé.

Profil des hypernatrémies dans le service de réanimation polyvalente au chu de yaoundé

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Objectifs: Déterminer le profil clinique, paraclinique et évolutif des patients présentant une hypernatrémie et admis en Réanimation polyvalente du CHU de Yaoundé. **Matériels et Méthodes:** Nous avons mené une étude transversale, descriptive de Janvier à Décembre 2016, à partir des dossiers des patients admis dans le service de Réanimation Polyvalente du CHU de Yaoundé. Nous avons recueilli les données socio-démographiques, cliniques, paracliniques et évolutives des patients dont la natrémie était supérieure ou égale à 150mmol/l à l'admission. La correction du déficit hydrique se faisait avec de l'eau plate par la sonde nasogastrique et/ou du soluté mixte. Les données ont été analysées à l'aide du logiciel Epi-Info. **Résultats:** Des 287 patients admis pendant cette période, 17 (62,5% de femmes) présentaient une hypernatrémie, soit une prévalence de 5,9%. L'âge moyen a été de $55 \pm 16,56$ ans. L'incidence de l'hypernatrémie a été de 5,9%. La natrémie moyenne était de $157,4 \pm 38,5$ mmol/l. La majorité des patients avait un score de Glasgow inférieur à 10 (59%) et des signes cliniques de déshydratation(53%). Environ 94% de nos patients avaient également une insuffisance rénale. Le sepsis sévère(53%) et les accidents vasculaires cérébraux(18%) étaient les pathologies les plus fréquentes. La durée moyenne d'hospitalisation était de $8,8 \pm 8,7$ jours. Le taux de mortalité a été de 75%. **Conclusion:** La mortalité chez les patients admis en soins intensifs avec une hypernatrémie est élevée dans notre milieu. **Mots clés:** hypernatrémie, insuffisance rénale, réanimation, Yaoundé

Les troubles anxieux chez l'insuffisant rénal chronique au stade préterminal suivi en consultation externe de Néphrologie au CHU/YO

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Objectifs: Evaluer la morbidité anxieuse des patients suivis en consultation externe de Néphrologie pour maladie rénale chronique aux stades III et IV au Centre Hospitalier Universitaire Yalgado Ouédraogo (CHU-YO). **Patients et méthodes :** Il s'est agit d'une étude transversale menée du 15 février au 31 Mai 2016. Tous les patients souffrant de MRC stades III et IV âgés d'au moins 18 ans, sans antécédents personnels psychiatriques connu avant la découverte de la MRC étaient inclus. La taille minimale de l'échantillon estimée selon la formule de Swartz avec une marge de 10% était de 171 patients. Les critères diagnostiques de l'échelle de Hamilton (Hamilton Anxiety Rating Scale) ont été utilisés. **Résultats.** Cent-quatre-vingt-onze patients ont été inclus. L'âge moyen était de $53,8 \pm 14,4$ ans. Les hommes représentaient 58,1 % de la population. La prévalence des troubles anxieux était de 42,4% (81 patients). Les symptômes anxieux étaient sévères, modérés ou légers dans respectivement 6,8 %, 8,9 % et 26,7 % des cas. Le sexe féminin ($p = 0,008$), la présence d'autres pathologies chroniques ($p = 0,046$) étaient statistiquement corrélées à l'anxiété aussi bien à l'analyse bivariée que multivariée (sexe féminin $p=0,014$; antécédents de maladie chronique $p=0,045$). **Conclusion:** L'anxiété est fréquente chez les patients en IRC au stade pré-dialytique d'où l'intérêt d'un dépistage systématique pour une meilleure prise en charge des patients. **Mots clés:** anxiété, MRC, prévalence, Burkina Faso

Evaluation de la demande en greffe rénale dans une population de patients traités par hémodialyse chronique en cote d'ivoire

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Introduction: La greffe rénale, considérée comme le traitement de choix de l'insuffisance rénale terminale, est une activité récente en Côte d'Ivoire qui est appelée à se développer. **Objectif:** Evaluer la demande en greffe rénale dans une population de patients traités par hémodialyse itérative et déterminer les éventuels obstacles qui pourraient être un frein à son essor. **Patients et méthode:** Etude transversale réalisée entre Mai et Juin 2016 dans les centres d'hémodialyse d'Abidjan. Les patients dont l'âge était ≥ 18 ans, traités par hémodialyse depuis au moins 6 mois ont été soumis à un questionnaire avec leur consentement. Une analyse statistique a été effectuée pour rechercher les facteurs associés à la demande en greffe rénale. **Resultats:** Deux cent quatre vingt quinze (295) patients dont 211 (71,53%) hommes ont accepté de participer à l'étude. L'âge moyen était de $44,53 \pm 12,09$ ans (19-75). Dans cette population, 36,61% avaient un niveau d'étude supérieur, 70,85% étaient chrétiens, 66,44% vivaient en couple, 56,61% étaient sans revenus et 74,92% étaient traités dans les centres de dialyse publics. La durée médiane en dialyse était de 34 mois. La quasi-totalité des patients (97,29%) avaient déjà entendu parler de greffe rénale et pour la première fois après leur mise en dialyse (51,94%). Deux cent trente et un patients (78,31%) étaient demandeurs de greffe et parmi eux seuls 39,39% avaient un potentiel donneur vivant. Les principales motivations étaient le souhait d'arrêter la dialyse (52,38%) et la recherche d'une meilleure qualité de vie (41,13%). Pour les 64 patients refusant la greffe rénale, 45,31% ont évoqué un coût élevé par rapport à l'hémodialyse. Les patients demandeurs de greffe rénale avaient une durée en dialyse plus longue par rapport aux non demandeurs (36 vs 21 mois, $p < 0,00$). Les facteurs associés à la demande en greffe rénale étaient l'âge moyen < 45 ans ($OR = 2,14$ IC : 1,12-4,06 $p = 0,02$), la durée médiane en dialyse > 34 mois ($OR = 2,12$ IC : 1,15-3,88 $p = 0,01$) et la religion chrétienne ($OR = 0,43$ IC : 0,20-0,92 $p = 0,03$). **Conclusion:** Une grande proportion de patients traités par hémodialyse chronique désire être greffée. Cependant, il faut une promotion du don d'organe et l'implication des autorités politiques pour réduire le coût de la greffe rénale afin de développer cette activité en Côte d'Ivoire. **Mots clés:** Demande en greffe rénale, Hémodialyse, Côte d'Ivoire

Complications cardiaques, niveaux de fonction rénale et facteurs de risque cardiovasculaire dans la population générale de Guéoul (Sénégal).

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Objectifs: Etudier les relations entre les complications cardiaques, les niveaux de fonction rénale et facteurs de risque cardiovasculaire dans la population générale de Guéoul. **Patients et méthodes :** Il s'est agi d'une étude transversale menée du 01 Novembre 2012 au 10 Décembre 2012 à Guéoul. Tous les sujets ayant participé à l'étude de Guéoul chez qui un dosage de la créatininémie, un électrocardiogramme et une échographie-Doppler cardiaque étaient réalisés étaient inclus. **Résultats:** 1411 sujets ont été inclus. L'âge moyen était de 48,45±12,68 ans (extrêmes : 35 et 95 ans) avec un sex-ratio de 0,34. Les prévalences des troubles du rythme cardiaque, de la conduction et de la repolarisation étaient respectivement de 0,85%, 7,08% et 7,58%. A l'ECG, les séquelles de nécrose et l'HVG étaient présents chez 2,4% et 18% des sujets. L'HVG échographique et la dysfonction systolique du ventricule gauche étaient respectivement présentes chez 9,57% et 2,34% des individus. Les prévalences de séquelles de nécrose, des troubles de la conduction, de la dilatation ventriculaire gauche, de l'HVG échographique et de la dysfonction systolique du ventricule gauche étaient croissantes avec le déclin du DFG. Il y avait une corrélation statistiquement significative entre les niveaux de fonction rénale et la géométrie ventriculaire gauche de façon globale ($p < 0,001$), l'hypertrophie de la paroi postérieure ($p = 0,0102$) et l'HVG échographique ($p < 0,001$) à l'analyse bivariée. A l'analyse multivariée, le sexe masculin ($p = 0,017$), l'HTA ($p < 0,000$) et l'obésité ($p < 0,001$) étaient associés à l'HVG échographique. La prévalence des complications cardiaques croît avec le déclin du DFG dans la population générale de Guéoul. **Mots clés:** complications cardiaques, fonction rénale, Guéoul, Sénégal.

Insuffisance rénale chez le patient insuffisant cardiaque en hospitalisation de cardiologie

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Objectif : Déterminer parmi les patients insuffisants cardiaques en hospitalisation de cardiologie la fréquence des sujets insuffisants rénaux et décrire le profil épidémiologique et clinique de ces patients. **Méthodologie :** Il s'agissait d'une étude rétrospective descriptive, couvrant la période du 1er décembre 2015 au 31 Mai 2016 réalisée dans le service d'hospitalisation de cardiologie du CHU Sylvanus Olympio. Tous les patients insuffisants cardiaques disposant d'une échographie cardiaque étaient inclus dans notre travail. L'insuffisance rénale a été définie par une clairance MDRD (Modification of Diet in Renal Disease) calculée inférieure à 60 ml/min/1,73m². **Résultats:** Nous avons colligé 108 patients disposant d'une échographie cardiaque parmi lesquels 25 soit 23% présentaient une insuffisance rénale. Dans le groupe des patients insuffisants rénaux, l'âge moyen était de 56,04 ± 21,2 ans (les extrêmes 19 et 78 ans) avec un sex ratio de 1,27. Il s'agissait pour la plupart de patients travaillant dans l'informel (80%) non assurés (96%) résidant en milieu urbain (84%). Les comorbidités présentes au diagnostic étaient l'HTA (72%), le diabète (16%) et le VIH (4%). Le tableau clinique à l'entrée chez tous les patients (100%) était celui d'une insuffisance cardiaque globale. Ils avaient en majorité (60%) une pression artérielle correcte. Sur le plan échocardiographie, aucun patient n'avait une fraction d'éjection du ventricule gauche (FEVG) normale. La moyenne de FEVG était de 0,36 (extrêmes 0,16 et 0,45). Les diagnostics lésionnels des IC étaient les cardiomyopathies dilatées dans 80% des cas. La moyenne de créatininémie était de 38 ± 14 mg/l avec une urémie moyenne de 0,9 ± 0,2 g/l. Il y avait une insuffisance rénale découverte d'emblée sévère chez 64% des patients. L'insuffisance rénale était aigüe chez 40% des patients. **Conclusion:** Au CHU SO, l'insuffisance rénale touche les sujets jeunes appartenant à la classe la plus défavorisée et de façon d'emblée sévère parmi les sujets insuffisants cardiaques.

Transplantation rénale et maladie familiale

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Objectif: Le but de ce travail est de mettre en avant l'impact des mariages consanguins sur l'émergence de pathologies familiales qui touche le continent africain et le défi de la réalisation de transplantations rénales à partir de donneurs vivants apparentés susceptibles d'être touchés par la maladie. **Méthodes:** Nous avons colligé 350 patients transplantés rénaux suivis entre 2007 et 2016 au CHU Nefissa Hamoud Parnet d'Alger et identifié la fréquence des pathologies familiales et le risque éventuel pour les donneurs vivants familiaux. **Résultats:** Nous avons transplanté 21 patients à partir de donneurs vivants apparentés dans le cadre de néphropathies familiales, la fonction du greffon était stable à 05 ans post transplantation rénale, les donneurs ont bénéficié d'un suivi annuel rigoureux et n'ont pas présenté de dysfonction rénale. 20 patients sont actuellement candidats à une greffe rénale, le dépistage familial était systématique, 10 patients ont bénéficié d'une biopsie rénale, dont 05 cas étaient en faveur d'une hyalinose segmentaire et focale, 01 cas d'amylose rénale; 03 membres de la famille des receveurs dans le cadre du diagnostic familial ont eu une biopsie rénale qui a conclu à des lésions segmentaires et focales. Aucun donneur n'a été récusé après mise au point complète du donneur potentiel. **Conclusion:** Les néphropathies familiales constitue un défi dans le continent africain de part la fréquence des mariages consanguins, la problématique de la greffe rénale doit être soulevée car la majorité des dons sont intra familiaux, un dépistage rigoureux de la famille doit être systématique et une exploration minutieuse du donneur avec un suivi post greffe annuel est une attitude nécessaire pour une meilleure prise en charge des patients greffés et des donneurs.

La Tuberculose en transplantation rénale: Expérience Service néphrologie et transplantation rénale CHU Nefissa Hamoud Parnet d'Alger (Algérie)

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Objectif: Evaluation d'intérêt du dosage quantiféron pour les patients en prégreffe rénale. **Matériels et méthodes:** C'est un travail rétrospectif qui a concerné 350 patients greffés rénaux suivis à l'unité de transplantation rénale du CHU Nefissa Hamoud Parnet d'Alger, nous avons évalué l'intérêt du dosage quantiféron pour les patients en prégreffe rénale, le nombre de cas de tuberculoses, et la gestion de l'immunosuppression à savoir les anticalcineurines associés aux inducteurs enzymatiques utilisés pour le traitement de la tuberculose et le risque de rejet potentiel. **Résultats:** Dans notre série 12 patients ont présenté une tuberculose dont 06 formes extrapulmonaires, 01 cas de tuberculose mammaire avec exploration d'une néoplasie sous jacente revenue négative, 01 cas de tuberculose péricardique, 01 cas de tuberculose digestive compliquée d'un syndrome d'activation macrophagique, 02 cas de tuberculose ganglionnaires, et 01 patient a présenté une tuberculose osseuse. Nous n'avons eu aucun cas de rejet avec une fonction du greffon stable. Concernant les patients candidats à une greffe rénale une donneuse de rein et 02 receveurs ont bénéficié d'un traitement prophylactique, et 03 patients candidats à une greffe rénale dont le diagnostic de tuberculose latente à été évoqué ont eu des tests au quantiféron négatif. **Discussion:** Il est intéressant de souligner que les localisations extrapulmonaires chez nos patients ont nécessité des explorations plus approfondies, en effet la patiente ayant présenté une tuberculose mammaire a bénéficié d'une mammographie complétée afin d'éliminer un éventuel cancer mammaire qui peut être associé, dans le cadre de la forme péricardique le risque essentiel était une tamponnade qui mettait le pronostic vital en jeu avec risque d'engainement péricardique à long terme révélant la particularité de ses formes cliniques, parallèlement un monitoring rapproché des immunosuppresseurs a été instauré évitant de ce fait le risque de rejet et de perte de greffon, enfin de nouveaux moyens diagnostiques comme le test au quantiféron constitue un moyen de diagnostic avant la greffe rénale dans les formes latentes. **Conclusion:** Les tuberculoses extra pulmonaires sont très fréquentes chez les patients transplantés rénaux immunodéprimés du fait de l'existence de la tuberculose à l'état d'endémie dans notre pays, le traitement prophylactique doit être discuté chez les transplantés.

Concept du don d'organes parmi le personnel médical du Centre Hospitalier Universitaire de Rabat

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Objectif: D'évaluer l'attitude du personnel médical vis-à-vis du don d'organes. **Matériel et méthodes:** Il s'agit d'une étude prospective étalée sur une période de 4 mois. Un questionnaire a été distribué et expliqué au personnel de santé. Les 15 questions de l'enquête répondaient à 4 thèmes principaux : informations sociodémographiques; attitude vis-à-vis du don d'organes ; évaluation des connaissances concernant le don d'organes ; motifs de refus ou d'acceptation du don d'organes. **Résultats:** Parmi les 203 membres du personnel inclus, 37,5% avaient des connaissances préalables sur la greffe d'organes, 29,5% connaissaient la loi relative au don d'organes, 48% ont déjà effectué un don de sang, 69% ont manifesté leur accord pour un don d'organes pendant leur vie, et 86% ont déclaré leur accord pour un prélèvement après leur mort. Les motifs de refus étaient globalement : une méconnaissance des risques, désir de respect des cadavres. Le motif religieux était présent comme motif de refus, puis le motif éthique. En analyse univariée, seul le sexe du personnel a été noté comme un facteur significatif d'acceptance du don d'organes pendant la vie ($p \leq 0,01$). En analyse multi variée, les caractéristiques associées à l'acceptance du don pendant la vie étaient le sexe et l'effectuation préalable d'un don d'organes (0,05 et 0,001 respectivement). **Conclusion:** Le personnel de santé est le guide et la clé du don d'organes. Pour que la greffe d'organes soit promue, le personnel de santé doit être informé sur les dimensions éthique, morale, et religieuse de la transplantation d'organes.

Facteurs de risque de reprise retardée de la fonction du greffon à partir de donneurs vivants

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Objectif: D'étudier les facteurs de risque de survenue de cette complication et leur impact sur la fonction du greffon.

Matériel et Methodes: Notre étude est rétrospective sur une période de 16 ans. Quatorze transplantés rénaux à partir de donneur vivant ont présenté une RRFG. La RRFG est définie par la nécessité d'une séance d'épuration extra-rénale au moins lors de la première semaine post-greffe ou un taux de créatininémie $> 30\text{mg/l}$ à j5 de la greffe rénale en absence de recours à la dialyse. **Resultats:** L'incidence de la RRFG est de 14,8% dont 10,9% ont nécessité le recours à l'épuration extrarénale. L'âge moyen des receveurs est de $36,2 \pm 10,5$ ans avec une prédominance masculine. La durée moyenne de la dialyse avant la greffe est de 33 mois. Le nombre moyen d'incompatibilités HLA est de $3 \pm 1,3$. Le temps moyen d'ischémie froide est inférieur à 2 h chez tous nos receveurs. La recherche d'anticorps anti HLA est négative chez tous les patients. Un antécédent d'immunisation avant la greffe est noté chez 35,7% des patients. La clairance de la créatinine selon MDRD au moment du RRFG est de 43 ± 13 ml/min. La survie des patients et des greffons à 1 an est de 100%, à 7 ans la survie des patients est de 100% et des greffons est de 85,7%. En analyse uni et multivariée, le sexe masculin et le nombre d'incompatibilités HLA représentent les principaux facteurs de risque ($p \leq 0,001$ et 0,02 respectivement).

Conclusion: L'incidence de la RRFG est très élevée dans notre série par rapport à la littérature et favorisée par l'incompatibilité HLA et le Sexe masculin du receveur

L'anémie en transplantation rénale: prévalence et facteurs de risque

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Objectif: Etudier la prévalence de l'anémie chez les transplantés rénaux de notre centre et ses facteurs de risque ainsi que son impact sur la fonction du greffon. **Matériel et méthode :** Nous avons mené une étude rétrospective sur une période de 18 ans incluant 105 transplantés rénaux par un donneur vivant dans notre série. Nous avons relevé à l'admission les caractéristiques clinico- biologiques (Age, sexe, taux d'hémoglobine), thérapeutiques et impact sur la fonction du greffon. L'anémie est définie selon l'American Society of Transplantation par un taux d'hémoglobine inférieur à 12 g / dl chez les femmes et inférieur à 13 g / dl chez les hommes. Nous avons comparé 2 groupes de patients, avec et sans anémie afin de déterminer les facteurs de risque. **Résultats:** L'âge moyen de nos patients est de 32 ±12 ans avec une prédominance masculine. L'immunosuppression est triple pour tous les patients associant des corticoïdes (100%), des anti calcineurines (cyclosporine 87,6% ou tacrolimus 12,3%) et un anti prolifératif (MMF 84,7 % et imurel 15,3%). La prévalence de l'anémie en post greffe est de 81,9% à 1 mois, de 51,4% à trois mois et de 30,4% à 5 ans de la transplantation rénale avec un taux moyen d'hémoglobine de 11g/dl à 1 mois. Sa présence avait un impact sur la survie du greffon avec un risque de détérioration de la fonction rénale multiplié par un facteur de 3,2. Les facteurs de risque d'anémie sont représentés par le jeune âge du receveur, le sexe féminin et la dysfonction du greffon. Un traitement par de l'érythropoïétine est instauré chez 17,14% des patients, le fer oral chez 45,7% et le fer injectable chez 2,8% des patients. **Conclusion:** L'anémie représente un problème fréquent et peu pris en charge chez le patient transplanté rénal. Plusieurs études prospectives sont en cours pour évaluer les conséquences de l'anémie et les bénéfices de son traitement sur la qualité de vie, la morbidité cardiovasculaire et la dysfonction chronique du greffon

Pyélonéphrite emphysémateuse sur allogreffe rénale

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Hospital Mustapha Algiers

Objectif: Rapporter un cas de Pyélonéphrite emphysémateuse (PNE) sur allogreffe rénale

Cas : Une femme de 36 ans transplantée en Janvier 2007 avec un greffon rénal d'un donneur vivant.

Les suites opératoires étaient simples avec la reprise d'une fonction rénale normale. Neuf ans après la transplantation, la patiente était transférée, en urgence, pour une anurie associée à une douleur de la fosse iliaque droite et de l'hypogastre avec des signes de sepsis grave avec une fièvre à 39,5 °C, justifiant la réalisation d'hémocultures .Le bilan biologique montrait une dysfonction du greffon nécessitant des séances d'hémodialyses et une hyperglycémie, et le scanner abdomino pelvien réalisé en urgence a mis évidence des bulles d'air dans le parenchyme du greffon sans collection périrénale ni obstructions des voies urinaires. Les hémocultures ont identifiées un *Escherichia coli*. Elle a reçu une antibiothérapie par voie veineuse ainsi qu'une insulinothérapie. L'évolution était favorable avec une amélioration clinique et biologique progressive. Elle fut réadmise un mois plus tard, pour un tableau similaire associé à un sepsis sévère et un collapsus tensionnel malgré 48 heures d'antibiothérapie et nécessité d'administrer des amines vasopresseurs. La patiente est décédée dans un tableau de choc septique associé à une hémorragie digestive alors que l'indication de néphrectomie a été posée.

Conclusion: La PNE est une forme grave de l'infection du haut appareil urinaire, Elle est très rare chez le greffé rénal mais elle peut mettre en jeu le pronostic vital. L'association d'une réanimation médicale précoce à un geste chirurgical percutané ou endoscopique en urgence doit être privilégiée et améliore le pronostic.

Co-infection à *Mycobacterium tuberculosis* et *Pneumocystis jiroveci* chez un transplanté rénal

Mehdi Rabhia

Hospital Mustapha Algiers

Objectif: Rapporter un cas d'un patient greffé rénal ayant présenté une co-infection à *Mycobacterium tuberculosis* et *Pneumocystis jiroveci* dans un contexte d'un traitement immunosuppresseur intensifié. **Cas:** Patient de 36 ans transplanté en Mars 2015 avec un greffon rénal d'un donneur vivant. Les suites opératoires étaient simples avec la reprise d'une fonction rénale normale. Ce patient a développé un rejet mixte (confirmé à la biopsie rénale) à 7 mois post greffe alors qu'il était sous traitement immunosuppresseur à doses correctes. Sa créatininémie est passé de 28 mg/L à 13mg/L après traitement immunosuppresseur intensifié. Trois mois après, il fut hospitalisé dans un tableau de syndrome de détresse respiratoire aigue associée à une fièvre à 38,7°C, pneumopathie infiltrative diffuse et altération de la fonction rénale. La fibroscopie bronchique et le lavage bronchoalvéolaire ont mis en évidence des kystes de *Pneumocystis jiroveci* et le BK positive à la culture faite un mois auparavant. La sérologie (VIH, CMV) était négative. L'évolution clinique a été favorable sous traitement antituberculeux et antifongique adapté. **Conclusion:** Les infections opportunistes grave peuvent compliquer les pathologies chez l'immunodéprimé, comme les transplantés rénaux chez lesquels tout clinicien doit savoir reconnaître et l'intégrer à la stratégie diagnostic et thérapeutique devant un tableau de SDRA.

Idiopathic nephrotic syndrome in children: A study from 40 cases in Dakar

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Objectives: The aim of this study was to determine the histologic, clinical, therapeutic profile and outcome of idiopathic nephrotic syndrome in children in Dakar. **Patients and Methods:** It was a retrospective 3 years study in the pediatric department of Aristide Le Dantec Hospital. We included all patients between 2 and 12 years of age who consulted during this period for nephrotic syndrome of which no secondary cause was found. **Results:** During the study period, 40 patients presented an idiopathic nephrotic syndrome with a prevalence of 23%. The mean age was 7.11 ± 3.14 years with a sex ratio of 1.85. Edema was found in 100 % of patients. Hypertension was found in 5 % of cases. 22 patients (55%) had oliguria. The mean proteinuria was 145.05 ± 85.54 mg/kg/24 h. Hematuria was noted in 11 cases (27.5%). Renal insufficiency was found in 3 patients (7.7 %). Renal biopsy was performed in 7 patients (18 %) and found focal segmental glomerulosclerosis (FSGS) in 57,2 % (n = 4), minimal change disease (MCD) in 28.5 % (n = 2) and 1 case of mesangial proliferative glomerulonephritis. 39 patients (%) received steroids. 30 patients reached remission after steroid therapy. Cyclophosphamide was used in association with steroids in 4 patients (10%) and azathioprine in 4 patients (10%). Complete remission is found in 89.8 %. Relapse was found in 16 patients (40%) with a mean of 2.50 ± 1.03 relapses. 3 patients (7,5 %) progress towards chronic kidney disease. The factor steroid resistance found in our study was proteinuria above 150 mg/kg/jour ($p = 0,024$) at admission. **Conclusion:** This study shows that idiopathic nephrotic syndrome in children is relatively frequent in our country with a prevalence of 23%. However evolution was mostly favorable with complete remission in 89.8 %. **Keywords:** idiopathic nephrotic syndrome – children – Dakar.

Pattern of admissions at a paediatric nephrology unit in south west Nigeria over a period of one year

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Objectives: Data on the epidemiology of various paediatric renal diseases in sub-Saharan Africa is limited. To contribute to the available information, we reviewed the pattern of admissions in our Paediatric Nephrology Unit over a period of 1 year. **Patients and methods:** We obtained information regarding admissions demography, diagnosis and discharge from October 2015- September 2016 from the admissions and discharge database of our paediatric nephrology unit. **Results:** A total of 121 (males and females) were seen accounting for 138 admissions were managed over the period. The cases were acute kidney injury 36.6% (n=44), nephrotic syndrome 30.3% (n=37), chronic kidney disease (excluding nephrotic syndrome and posterior urethral valves) 9.0% (n=11), posterior urethral valves 8.2% (n=10), acute glomerulonephritis 6.6% (n=8) and others 9.8% (n=12). **Conclusion:** The predominant cases of paediatric kidney disease in our centre and in many parts of sub-Saharan Africa remain acute kidney injury, nephrotic syndrome, chronic kidney failure and posterior urethral valves. Support is needed in the management of children with these diseases. **Keywords:** nephrology admission- children- AKI – nephrotic syndrome – Nigeria

A case of complicated acute kidney injury associated with a severe sepsis in a Cameroonian child with posterior urethral valves

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Objectives: We present the case of a delayed diagnosed posterior urethral valves complicated by acute kidney injury and urinary tract infection with septicemia, in a Cameroonian child. **Case presentation:** A male infant, aged 2 months, with past medical history of a febrile urinary tract infection, was transferred to our Intensive Care Unit for the medico-surgical management of complicated posterior urethral valves. As complications we had acute kidney injury with hyperkalemia, and a septicemia due to *Klebsiella pneumoniae*. The infant was notably treated by intravenous antibiotics which were adapted following results of blood culture, kayexalate, salbutamol and other standard measures of care. Four days after admission, a urinary diversion by vesicostomy was realized prior to a later valve ablation. Unfortunately the child died three days after surgery in a context of severe hyperkalemia and uremic syndrome. **Conclusion:** This case drawn clinician's attention on the importance to ask for morphological work-ups while facing any child aged from 2 months to 2 years after a febrile urinary tract infection, in order to detect and correct at time any Congenital Anomalies of the Lower Urinary Tract (CALUT). It also puts in light the scarcity of pediatric dialytic structures in our context. **Keywords:** Posterior Urethral Valves - Acute Kidney Injury - *Klebsiellapneumoniae*– Cameroon.

Vitamin D status of children with moderate to severe chronic kidney diseases at the red cross children's hospital Cape Town

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Objectives: To determine the prevalence of vitamin D deficiency in children with CKD stages 3-5 and those on chronic dialysis, any relationship between vitamin D deficiency and stage of CKD, and identify any clinical correlates associated with the vitamin D status. **Patients and methods:** A single centre, retrospective review of forty-six children less than 18 years attending the renal clinic of the Red Cross Children's Hospital over a period of one year (October 2013- November 2014) who were in CKD stages 3- 5D. **Results:** The prevalence of suboptimal vitamin D among the study population was 73.9% (Vitamin D deficiency and insufficiency accounted for 43.5% &30.4% respectively). Vitamin D deficiency was found to be significantly higher in older age group (10 years and above) compared to the younger age group($p=0.0$). There was no significant sex effect($p=0.693$), 12 out of 15 black (80%) had suboptimal vitamin D, 19 of the 26 coloured (73.1%), 2 of 4(50%) white and the 1 Asian child (100%) had suboptimal vitamin D levels. None of the white or Asian had deficiency of vitamin D.90% of patients on chronic dialysis, 80% of whom were on peritoneal dialysis, had suboptimal levels of vitamin D. Age, weight, height, and albumin were significantly associated with vitamin D levels. There was a positive linear relationship between vitamin D and albumin (Spearman rho correlation coefficient = 0.397; $p = 0.007$). 87.5% of patients with nephrotic range proteinuria had subnormal vitamin D levels with 80% of them were vitamin D deficient ($p=0.04$). A higher percentage of vitamin D deficiency/insufficiency was documented during the winter season (70.6%) compared to summer (29.4%), however this difference was not statistically significant $p= 0.387$. **Conclusion:** Suboptimal vitamin D is high among children with moderate to severe CKD and significantly higher in those undergoing chronic dialysis. The emerging evidence of the role of vitamin D in slowing progression of CKD highlights the need for monitoring and correction of vitamin D levels in children who are pre-dialysis. **Keywords:** suboptimal vitamin D, 25-(OH)vitamin D, chronic kidney disease(CKD), children.

State of research on renal complications of sickle cell children and adolescents: A report from the Democratic Republic of Congo

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Objectives: In the Democratic Republic of Congo (DRC) with the third worldwide incidence with 40,000 sickle cell neonates per year associated with the clinically severe form of the Bantu haplotype, the incidence of this renal impairment is probably under reported due to lack of pediatric nephrologists, limited diagnostic equipment, inadequate drug supplies, and social stigma. The objective of this paper is the state of research on kidney complications and their limitations in our midst. **Patients and methods:** For this review, the search concerned all relevant publications identified by a search of PubMed, google scholar, WHO-Afro Library, African Journals Online and CABI from 1950 through 2016 using the term “Belgian Congo”, “Zaire” or “The Democratic Republic of Congo” combined with each of the following keywords separately; “sickle cell disease”, “sickle cell anemia”, “kidney”, “nephrology”, “proteinuria”, “microalbuminuria”, “hypertension” and “glomerular filtration”. **Results:** Only 6 records were found. Results were summarized by topic. Glomerular hyperfiltration was observed from 30 to 40% of Hb-SS children, compared to 6% of children with Hb-AA. Hyperfiltration increases up to 14 years-of-age. A quarter of the Hb-SS Children with SCA with glomerular hyperfiltration had microalbuminuria. Proteinuria was found from 3 to 6% Hb-SS children. Prevalence of microalbuminuria varies from 12 to 19%, and the mean age was 10.5 ± 4.2 years. The association between albuminuria and two protective antioxidant enzymes, the glutathione peroxidase (GPx) and the Cu-Zn superoxide dismutase (SOD) showed that LDH and WBC count were positively correlated with UACR whereas GPx and Cu-Zn SOD were negatively correlated with UACR. Low glomerular filtration was found in 6% of Hb-SS children and 23% of them presented microalbuminuria. Hypertension was a rare event and was found in 1.5% of children with Hb-SS. In a recent study, it appears that at least one of six children with sickle cell trait may exhibit hyperfiltration. No studies have been conducted on the tubular function due to the absence of adequate laboratories. Conclusion: Glomerular hyperfiltration and microalbuminuria are more common in our midst. Albuminuria is associated with decreased antioxidant capacity and, increased levels of markers of hemolysis and inflammation. **Keywords:** sickle cell disease- glomerular hyperfiltration – microalbuminuria – DR Congo.

Working towards improved ISN/IPNA fellowship programs: Experience and recommendation

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Objectives: This presentation will provide experience of joint ISN/IPNA fellowship carried out at Red Cross Children's hospital in Cape Town. It will also provide recommendations for improving the current fellowship program. Results: IPNA and ISN have provided support for nephrology training in Africa and other Low income countries. In the past 26 years ISN has provided 600 fellowships to low and middle income countries. Nigeria and Kenya are among African countries with the leading number of recipients. The fellowships are largely based on clinical attachment and are aimed at offering clinical skills. These fellowships do not have curricula to guide what is to be taught at each training centre; therefore the training is left at the discretion of the training supervisor. The skills acquired largely depend on the regulatory council provisions, and in some countries the fellows are mere observers while in other countries they get access for hands-on clinical practice. Red Cross Children Hospital is one of the centres which offer hands-on clinical practice given the support of the health profession council which offers registration for fellows. The current fellowship programs do not offer evaluation for the knowledge and skills acquired and this is largely due to lack of guiding curricula. With the existing stable internet access to most of fellowship training centres it is feasible to introduce internet based self-learning modules for fellows together with online-evaluation (examination), this will ensure acquisition of knowledge as well as clinical skills. This will also improve recognition of fellows compared to current system. Several professional organs have employed internet based training, a good example being the European League Against Rheumatology and Paediatric Rheumatology European society which offers online training for rheumatology. Conclusion: IPNA and ISN have played a significant role in addressing the shortage of nephrologist in African countries and other developing countries. However there is still significant shortage calling for more efforts and improved methods for training.

What is the outcome of a 3 months old child with severe renal failure in Cameroon?

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Objectives: We present the case of a 3 months old child with severe renal failure referred from the main teaching hospital in the country to a faraway community based hospital successfully managed via locally adapted method of peritoneal dialysis (PD). **Case report:** Miss N.C a 3 months old child resident of Ayos (141Km East of Yaoundé, the capital city of Cameroon) was managed for meningitis where she received gentamicin regimen and referred to the pediatric unit of Yaoundé University Teaching hospital for better management. She was found to be anuric with raised creatinine value of 2.9mg/dl. A diagnosis of gentamicin induced acute tubular necrosis was made and there was an indication for RRT by the adult nephrology unit. The unavailability of PD in any referral centre in Yaoundé and Douala (the 2 largest cities in Cameroon) prompted referral to Mbingo Baptist hospital (MBH) a community based hospital located 464Km west of the city of Yaoundé. On arrival at MBH, it was a severely fluid overloaded, anuric and lethargic child with Urea/creatinine of 111/5.2 mg/dl. The child had a pediatric Tenckhoff catheter inserted under general anesthesia with the help of the surgical team and had a total of 71 exchanges of locally made PD fluid (50% Dextrose and Ringer lactate) over a period 12 days. There was reoccurrence of diuresis on day 10 post admission and renal function at day 12 post admission was, urea/creatinine= 18/1.2 mg/dl and Na/K/Cl= 131/5.8/110 mmol/l. The patient was discharged on day 20 post admission with renal function values of Urea/creatinine= 13/1.1 mg/dl, Na/K/Cl= 138/5/106. There was no peritonitis during hospitalization and she had the Tenckhoff removed. Two weeks after discharge the result of renal function were; urea/creatinine= 11.9/0.9 mg/dl, Na/K/Cl=146/4.3/109. At the time we are filling this report, the patient is celebrating her 1st birthday, although we have no report of her present renal function, she is doing well according to her mother. **Conclusion:** The outcome of many children aged < 1 year with severe Acute Kidney injury in settings where there are no facilities for PD is very poor. It is the only treatment modalities for RRT to such patients. However the faith of our patient was completely different, thanks to the collaboration existing between the nephrologist of the teaching hospital and the community based hospital. There is a need to create a center for peritoneal dialysis in the teaching hospital where most of such patients are referred and support the only existing one, in order to change the outcome of such patients in our environment. **Keywords:** Outcome, severe renal failure, Children < 1 year, Cameroon.

Renal function abnormalities in HIV- infected children followed up in two urban district hospitals in Cameroon

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Objectives: To study renal function abnormalities in HIV-infected children. **Patients and Methods:** We conducted a cross-sectional study from March 1 to July 31, 2016 in the HIV-treatment centers of two urban hospitals in Cameroon. We included children infected with HIV aged 0-15 years, and excluded children with known urinary tract malformations. Children were enrolled consecutively. Relevant clinical data including nutritional status was recorded. A random urine sample was then collected for urine dipstick analysis for albuminuria, hematuria, leucocyturia, and glycosuria. We used serum creatinine to estimate GFR from the modified Schwartz equation. We performed a repeat urine dipstick test after 2 weeks in patients with abnormal findings for confirmation. Renal function abnormalities was defined as the presence of $\geq 1+$ leucocytes, albumin, hematuria or glucose in urine or an $eGFR < 90 \text{ ml/min}$ or both. **Results:** In total, 105 participants (53 girls) were included, with a mean age of 9.6 ± 4.4 years. All (100%) were infected with HIV-1, 82% were on cotrimoxazole and 11.7% had an intercurrent opportunistic infection (OI). About 87% were receiving HAART with 27.4 % (n=25) of them receiving tenofovir. The mean duration on HAART was 4.2 ± 3 years. Their mean CD4 count was 539 ± 409 cells/mm³, and < 200 cells/mm³ in 13% of patients. Malnutrition was present in 29.5% and growth retardation in 16.2%. The prevalence of urine abnormalities was 30.4% (n=32). Leucocyturia (n = 16), albuminuria (n=12) and hematuria (n=11) were the main urine abnormalities. A total of 10(9.5%) children had an $eGFR < 90 \text{ ml/min/1.73m}^2$. Proteinuria was the sole factor predictive of a decrease in $eGFR$ ($p=0.001$, AOR=153), while hematuria was associated with the presence of OI ($p=0.046$, AOR=5.9) and leucocyturia with non-use of HAART ($p=0.001$). **Conclusion:** Renal function abnormalities are frequent in HIV- infected children. Systematic screening for these abnormalities may reduce the morbidity and mortality in HIV. **Keywords:** HIV infection, children, urine abnormalities, GFR.

Acute kidney injury among children with severe malaria in Khartoum State, Changing trends

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Objectives: To study the prevalence, clinical and laboratory features of acute kidney injury with severe malaria and to recognize its severity and outcome. **Patients and methods:** It is a prospective hospital-based study, conducted in Gaffer Ibn Auf Children Tertiary Hospital, Ahmed Gasim Specialized Hospital for children and Mohammed Elamin children hospital, which are the main paediatric hospitals in Khartoum State, during the period from Jan. 2014 to Dec. 2015. All children diagnosed with severe malaria aged ≤ 18 years were identified and patients with malaria and acute kidney injury were studied in this series. Data were collected through a predesigned questionnaire managed by the author, then coded and analysed by using Statistical package for Social science. **Result:** Out of 250 children that diagnosed with severe malaria, acute kidney injury was reported in 89(35.6%). From those (89) males were 56(62.9%) and the commonest age was between 6-10 years, 37(41.6%). The most frequent clinical presentation were fever occurred in all patients, change in urine colour in 87(97.8%), pallor in 78(87.6%) and oliguria in 68(76.4%), while hypertension was reported in 10(11.2%). Severe renal impairment was significantly higher among children of above 10 years. *P.falciparum* was most common species found (88.2 %) followed by *P.vivax* (4.4 %) and mixed infection *P. falciparum* ,*P.vivax* (4.4%). Hypokalaemia in 30(33.7%). Urinary investigations, protein, RBC and Hb were found in 72(80.9%), 71(79.8%) and 28(31.5%) respectively. All patients received anti-malarial medications, and it was mostly quinine intravenous 69(77.5%), which significantly associated with complete recovery 55 (94,8%). All received intravenous fluids, while 60(67.4%) had blood products. Dialysis was required for 22(24.7%). Complete recovery was reported in 58(65.2%), partial recovery in 19(21.3%), patients left against medical advice 5(5.6%) and 7(7.9%) died. **Conclusion:** The study concluded that, acute kidney injury among children with severe malaria was common, with high morbidity and proportionally low mortality; this was compatible with Asian subcontinent studies and slightly incompatible with some African studies. Acute kidney injury in malaria was found with variable clinical characters. **Keywords:** AKI- children- malaria - *P falciparum* – Khartoum.

Schimke immune-osseous dysplasia syndrome: Case report

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Objectives: We reported a case of a female, 8 years old from a consanguineous marriage. **Case report:** At 5 years and 3 month , she developed a nephritic syndrome and estimated creatinine clearance (Schwartz) pointing to stage IV chronic kidney disease (17.4 ml/min/1.73 m². She was submitted to steroid therapy for six months, and she was steroid-resistant. A renal biopsy was carried out , showing focal segmental glomerulosclerosis - FSGS and focal tubular atrophy with mild interstitial fibrosis. She was diagnosed with important growth retardation and low weight gain. She had psychomotor development milestones at the appropriate times. On physical examination: no palpable thyroid, Olympian forehead, thin and sparse hair and pectuscarinatum. At 5years and 8 month she started peritoneal dialysis. The genetic study in 2016, showed an homozygote mutation in exon 12 of SMARCAL1gene. She is waiting to be transplanted from her uncle's kidney. **Conclusion:** Schimke immune-osseous dysplasia (SIOD) is a rare autosomal recessive multisystem disorder. It usually manifests with spondylo-epiphyseal dysplasia associated with progressive kydney disease secondary to steroid resistant nephrotic syndrome with other abnormalities such as T-cell immunodeficiency, hypothyroidism and bone marrow aplasia. The diagnosis can be made with genetic testing demonstrating a biallelic mutation of SMARCAL1 gene. **Keywords:** immunologic deficiency syndromes; osteochondrodysplasias; nephrotic syndrome.

Diagnosis, management and outcome of posterior urethral valves in children at a tertiary centre in South Africa

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Objectives: The study aimed to review the age at diagnosis, management and outcomes of PUV in children in a tertiary hospital in South Africa. **Patients and methods:** All files of children who were referred to the Paediatric Nephrology Unit at Steve Biko Academic Hospital in Pretoria, South Africa, from January 2000 to December 2015 were retrospectively reviewed. Data extracted included: antenatal diagnosis of PUV, age at diagnosis postnatally, presence of acute kidney injury at diagnosis, management, complications and outcomes i.e. chronic kidney disease (CKD) or death. **Results:** A total of 62 boys with a mean and median age at diagnosis of 21.7 and 3.5 months respectively, had PUV. Micturating cystourethrograms were done in 81% of patients. Sonar reports showed that 18% of patients had renal dysplasia. Primary valve ablation was conducted in 36% of patients while diversions (vesicostomies, nephrostomies and ureterostomies) were done in 50% of patients. The commonest presenting clinical features were urinary retention 28/62 (45%), failure to thrive 15/62 (24%), urinary tract infections 6/62 (10%). 58% presented with associated acute kidney injury. 18/52 (36%) had CKD, 16/62 (26%) had hypertension and 6/16 (37%) had proteinuria at follow-up. Only 6/60 (10%) were diagnosed antenatally. **Conclusion:** A deliberate policy to have third trimester antenatal scans may improve outcome of affected children. **Keywords:** PUV – acute kidney injury – urinary diversions – South Africa

Aetiology, prognostic factors and treatment outcomes of acute kidney injury in children in a tertiary hospital in South Africa

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Objectives: To determine aetiology, prognostic factors and treatment outcomes of AKI in children in a tertiary hospital. **Patients and methods:** A file review of children with AKI was done (July 2002 to July 2016: Period 2). Results were compared to a study (1986 – June 2002: Period 1) at the same institution. Age, sex, aetiology, renal function, morbidity, mortality, dialysis requirement and outcome were analysed. 'Survivors' were Group 1 (complete/partial renal function recovery without need for continued dialysis) and 'non-survivors' were Group 2 (died/required continuation of dialysis). **Results:** Overall 177 children, median age 38.9 months [1.8 – 105.9 months], female: male ratio 1:1.8 were included. Causes were acute tubular necrosis (ATN) due to volume depletion 44/177 (25%), acute glomerulonephritis (AGN) 36/177 (20%), obstructive uropathies 34/177 (19%), toxins 24/177 (14%), ATN due to sepsis 15/177 (8.5%), haemolyticuraemic syndrome (HUS) 14/177 (7.9%), ATN post-surgery 10/177 (5.6%). 27% exclusively breastfed, 10% mixed fed. AKI developed in and out of hospital in 23% and 77% respectively. 32/177 were dialysed: 14/32 (44%) survivors, 7/32 had ongoing renal impairment, 8/32 died and 3/32 chronic dialysis. 29/32 (90%) had peritoneal dialysis (PD), 3/32 haemodialysis (HD). 13/29 (45%) on PD recovered, 16/29 (55%) in Group 2. 2/3 on HD died. Reduced consciousness/seizures ($P < 0.001$), liver dysfunction ($P < 0.001$), multi-organ failure ($P < 0.001$), oligoanuria ($P < 0.001$), disseminated intravascular coagulation ($P < 0.001$) and thrombocytopenia ($P < 0.020$) were significantly associated with poor outcome, similar to Period 1. Previously, causes were HUS (35.3%), ATN (31.4%), AGN (15.7%); 54/102 (53%) were dialysed and 16/54 (30%) died. **Conclusion:** ATN was the commonest cause of AKI in Period 2, compared to HUS in Period 1. The national policy of exclusive breastfeeding in the first 6 months may have played a protective role in reducing diarrhoeal associated HUS AKI in Period 2. **Keywords:** AKI- children –ATN- HUS - South Africa

Management of pyelo-ureteric junction obstruction in children in Yaoundé

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Objective: The purpose of this study was to report our experience in the management of pyeloureteric junction (UPJ) obstruction at the Yaoundé Gyneco-obstetric and paediatric hospital (YGOPH). **Methods:** We carried out a retrospective and descriptive study over a period of 10 years (june 2007-january 2017) in the pediatric surgery service of the YGOPH. Only medical records of pediatric patients aged 0-15 years in which the diagnosis of UPJ was documented by ultrasound and managed in the pediatric surgery service of the YGOPH were included. Data collected included: age, sex, kidney affected, antenatal diagnosis, time to consultation, presenting symptoms, ultrasonography findings, blood urea creatinine values, urine culture, time to surgery, indications, surgical procedure, complications and follow up. Antibiotrophylaxis with cotrimoxazole was systematic once the diagnosis was made. **Results:** During the study period, 12 patients were recorded; the hospital frequency was thus 1.2 case/year. The mean age was 4.5 years [4months-12years]. The sex ratio was 2. The left kidney was affected in 6 cases and the obstruction was bilateral in 1 case. Prenatal ultrasound detected renal pelvic dilatation in 50% of patients. The mean time to presentation was 29.3 months [0-10years]. The main presenting symptoms were: episodic flank pain (n=3), recurrent fever (n=1), dysuria (n=1), and a flank mass (n=1). On renal ultrasound prior to surgery, the average size of the renal pelvis was 24mm [15-60mm] and the average renal parenchyma thickness was 6mm [10-17mm]. Only 7 patients had done a radionuclide renography prior to surgery, and it showed absence of drainage from the affected kidney in 3 of these patients. Urine culture isolated *Escherichia coli* in 3 patients. The mean time to treatment was 7.5 months (1.5months-2.5years). Surgical indications included; presence of symptoms (n=6), recurrent documented urinary tract infections (n=2), size of the renal pelvis above 20 mm(n=5), increase in the size of the renal pelvis on ultrasound(n=3) and differential renal function less than 15% on radionuclide renography(n=3). The Anderson-Hynes pyeloplasty was performed to repair the UPJ in 8 patients, while 2 patients had a total nephrectomy. No surgery was required in 2 patients who were asymptomatic and aged less than 6 months. After a mean follow-up duration of 19 months [1month-10years], no complication was recorded. **Conclusion:** Late diagnosis of UPJ syndrome in children is still common in our milieu. However pyeloplasty remains the main surgical procedure performed. **Key words:** UPJ syndrome, children, management, Yaoundé.

Kidney failure post malaria in children: clinical, biological and evolutive profiles in chu sylvanus olympio de lomé

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CHU Sylvanus Olympio

Objective: Describe clinical, biological and evolutive profile of kidney failure (IR) post malaria in children in the CHU Sylvanus Olympio. **Method:** It was a retrospective study which took place from January 1st to December 31, 2012 in the Pediatrics department of the Teaching Hospital SYLVANUS OLYMPIO of Lomé on children aged 0 to 15 years admitted for severe malaria. Were included, all children hospitalized in the Pediatrics department for severe malaria with an increased serum creatinine > 7 mg/l. **Results:** during the study period, among 338 admissions for severe malaria, 24 patients associated renal failure with a drop thick positive to *Plasmodium Falciparum*. The prevalence of post-malaria AKI is 7.1%. Half of the patients (50%) had been subjected to traditional self-medication before hospitalization. The drugs used before admission were quinine (70.83%) and amodiaquine (41.6%). Most of children (54.17%) were admitted after an outpatient consultation and had oliguria in 75% and hemoglobinuria in 83.3% of the patients. According to the thick drop controls, therapeutic success was noted in 10 cases (41.67%). In the case of renal insufficiency, we found a total recovery in 12 cases (50%), partial recovery in 11 cases (45.8%), followed by death in 1 case (4.17%). The average length of hospital stay was 16 + 4.4 days. **Conclusion:** Acute post-malarial renal failure secondary to tubular necrosis may be the dominant clinical picture of severe malaria. Death may result. Preventing malaria would be the best way to avoid it. **Keywords:** AKI, severe malaria, haemoglobinuria, sub-Saharan Africa

Capacity building towards 0BY25 implementation: training of district medical doctors in the performance of peritoneal dialysis for AKI

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Objectives: From September 2014 to November 2014, the ISN together with its partners launched the 0by25 initiative in which zero death from AKI was to be recorded globally. Since then, the global nephrology community has stepped up its efforts in global awareness of AKI, its recognition, treatment and prevention. But the major challenge to this initiative in most developing countries has been the lack of nephrologists to tackle the problem head on. In this paper, we present a report on training of district medical officers and other health practitioners in the performance of peritoneal dialysis for AKI using improvised means. **Patients and methods:** This was a full, one-day workshop organized for non nephrologists on 3 different administrative capitals in Ghana. Lecture delivery was through interactive sessions, video presentations, hands-on-practical sessions on performing PD exchanges. Topics included: 1. Recognition of a child with kidney injury 2. Principles of peritoneal dialysis 3. Indications for dialysis therapy and writing of PD prescription 4. Technique in insertion of PD catheter including video presentation 5. Catheters suitable for use as PD catheters 6. Fluids suitable for use as dialysate 7. Performing the PD exchanges-practical session 8. Complications related to PD 9. Infection prevention in PD, among others. At the end of each training workshop, participants were given sample PD catheters for use in their respective health facilities. **Results:** A total of 131 doctors/Physician Assistants and 19 nurses were trained. Unofficial feedback from some trainees indicate that a number of them have been able to carry out PD successfully. Steps have been initiated to obtain the detailed records of all PDs carried out by these trainees. **Conclusion:** It is possible to equip non-nephrologists to perform PD for AKI in regions where expertise are lacking if the ISN 0by25 initiative is to be achieved. **Keywords:** ISN 0BY25 initiative – peritoneal dialysis – AKI- Ghana.

Paediatric haemodialysis (HD) and peritoneal dialysis (PD) in a tertiary health centre in Southwestern Nigeria- An update

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Objectives: Access to renal replacement therapy for children is a challenge in many parts of sub-Saharan Africa. Our unit has previously published articles on our experience with peritoneal dialysis and haemodialysis in children and adolescents in a low resource setting. We review recent data on paediatric HD and PD in our unit. This is to provide an update on the aetiology of acute kidney injury and chronic kidney disease among children undergoing dialysis and the outcomes in terms of in-hospital mortality. **Patients and methods:** We reviewed the database for children who received dialysis in our centre from September 2015- October 2016. We extracted records regarding demography, diagnosis, mode of dialysis, and in-hospital mortality. **Results:** A total of 51 children and adolescents had renal replacement therapy over the period. They were ages ranged from four months -17 years (mean 7.3±5.0 years), 60.8% (n=31) were males. Forty one patients (80.4%) had acute kidney injury, while the others had chronic kidney disease. Thirty seven had HD, while the others had PD. Age of those who had PD, and HD were median 0.96 (Range 0.33-3.0) and median 10.0 (range 2-17) years (p= 0.00) respectively. The main causes of AKI were sepsis (43.9%), malaria (36.6%), and acute glomerulonephritis (7.3%) while causes of CKD were glomerulonephritis (80%) and posterior urethral valves (20%). The overall mortality was 17.6% (n=9). Mortality in AKI and CKD were 14.6% (n=6) and 35% (n=3) respectively. Mortality among patients who had HD and PD were 16.2% (n=6) and 21.4% (n=3) (p=1.0) respectively. **Conclusion:** HD and PD remain viable for the management for paediatric AKI in low resource settings and should be supported, through training, access to consumables, and use of automated PD. The study also underscores the need for chronic renal replacement therapy. **Keywords:** renal replacement therapy – pediatric- AKI- Nigeria

Epidemiological and clinical study of urinary infections in the paediatric population in Cameroon: Case of Laquintinie Hospital of Douala

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Objectives: Determine epidemiological and clinical characteristics of urinary tract infections (UTIs) in the paediatric population. **Patients and methods:** We conducted a cross-sectional descriptive study in the paediatric department of Laquintinie Hospital of Douala from March 1st to July 31st 2016. We included all children aged 0 to 15 years, hospitalized for fever and urinary symptoms. We conducted a physical exam, urinary dipstick, urine culture in participants. Urinary tract ultrasound results, full blood count and C - reactive protein were exploited. We defined UTIs as being presence of a germ in the culture. **Results:** Sixty-four (9.2%) of the 696 patients evaluated had UTIs. The median age was 10.25 months (2-15 years), and 53% were male with ¼ who were not circumcised. Fever was the prime symptom (98.4%) and 54.7% had digestive signs. Approximately, 34% presented with growth delays. Biological abnormalities observed were high CRP levels in 53%, leukocytosis in 48% leukocyturia in 67% and nitrituria in 18.7%. The most encountered germs were *E. coli* (54.7%) and *Klebsiellapneumoniae* (31.3%). The sensitivity of *E. coli* was 34.3% for ofloxacin and 42.9% for ceftriaxone. That of *Klebsiellapneumoniae* was 40% for ofloxacin and 15% for ceftriaxone. We found 2 cases of unilateral hydronephrosis on the 30 ultrasounds conducted. Death rate was 3.1%, all due to septic shock. **Conclusion:** Approximately, 9% of hospitalized children for fever have urinary tract infections. This infection is more frequent in male infants and is associated to digestive manifestations. **Keywords:** Urinary tract infections – paediatrics – enterobacteria - antibiotics resistance - obstructive uropathies.

Epidemiology and outcomes of children with renal failure in the paediatric ward of a tertiary Hospital in Douala- Cameroon

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Objectives: Describe the Epidemiology and Outcomes of Children with Renal Failure in Douala. **Patients and methods:** We retrospectively reviewed medical records of children from 0-17 years with renal failure admitted in the Pediatric ward of the Douala General Hospital from 2004 to 2013. Renal failure referred to either acute kidney injury (AKI) or Stage 3-5 chronic kidney disease (CKD). AKI was defined and graded using the Pediatrics RIFLE criteria, while CKD was graded using the KDIGO criteria. Outcomes of interest were need and access to dialysis and in-hospital mortality. For patients with AKI renal recovery was evaluated at 3 months. **Results:** A total of 103 patients' records (62% males) were included. The median age was 84 months (IQR:15-144). The most frequent clinical symptoms were asthenia (97.8%), anorexia (92.3%) and 72.9% of participants were anuric. AKI accounted 85.5% (n=87) and CKD for 15.5% (n=16). CKD Stage 5 was the most frequent (81.3%). Chronic glomerulonephritis (9/16) and urologic malformations (7/16) were the causes of CKD. In the AKI subgroup, 93.2% were in stage F, with acute tubular necrosis (n=48) and pre-renal AKI (n=31) being the most frequent mechanisms. Sepsis (55%), severe malaria (22.9%) and nephrotoxins (6.8%) were the main aetiologies. A total of 8 of 14 (57%) with CKD, and 27 of 40 (67.5%) with AKI who required dialysis, accessed it. In-hospital mortality was 50.7% for AKI and 50% for CKD. Of the 25 patients in the AKI group with available data at 3 months, renal recovery was complete in 22, partial in one and 2 developed end-stage renal disease. **Conclusion:** Renal failure is severe and carries a high mortality in hospitalized children in Cameroon. Limited access to dialysis and lack of specialized paediatric nephrology services may explain this dismal picture. **Keywords:** Renal failure –children – epidemiology – outcomes – Cameroon

The International Paediatric Nephrology Association (IPNA) global renal replacement registry

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Objectives: In pediatric nephrology there is broad consensus that systematic monitoring of the incidence, prevalence and outcomes of renal replacement therapy (RRT) in children is desirable. This can serve several purposes including provision of demographics for resource allocation, documentation of workload and empowerment of further clinical research by providing epidemiological data. Unfortunately, databases are not available for many low- and middle-income countries in Africa and the world's most populous nations China and India. This leaves a large part of the global pediatric ESRD population unidentified and health care providers uninformed about the size of the treatment challenges ahead. Therefore, the International Pediatric Nephrology Association (IPNA) now initiates a global registry for RRT in children. **Patients and methods:** Every country/region around the world will be invited annually to submit a core dataset containing data on age, sex, primary renal disease, date and modality of RRT, date and cause of death. Data may be transmitted in different ways: (1) existing registries can provide a dataset and (2) representatives from countries not covered by existing registries can use an online data entry system (in development). **Results:** The IPNA Registry will produce global and country reports describing RRT incidence and prevalence, modality choices and patient survival rates. Detailed demographic and benchmarking figures will be generated to compare pediatric RRT characteristics in countries on a regional and global level. These data can serve as a basis for resource allocation by both hospital authorities as regional or national health care providers. **Conclusion:** Existing pediatric renal registries provide valuable information about children on RRT. However, global collaboration of registries is lacking. To enhance knowledge about the global demographics, workload, and key performance indicators on a regional and global level, the IPNA initiates a global collaborative pediatric RRT registry.

Epidemiology of Uro-nephrological diseases in paediatric unit in Laquintinie Hospital Douala Cameroon

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Objectives: Our aim is to describe the epidemiological characteristics of kidney diseases in children aged 0 to 15 years in the pediatric ward in a low developed country case of Laquintinie Hospital Douala Cameroon. **Patients and methods:** The study was transversal descriptive and retrospective from March 01 2014 to December 31, 2016. Included were children aged 0 -15 years who consulted or were hospitalized for kidney diseases in the pediatric ward of the Laquintinie Hospital Douala during the period of the study. **Results:** A total of 107 children were included in the study: 63 boys (59%) sex ratio 1, 44. The prevalence of renal diseases was 1.10 % of the children admission. The median age was 16 months. The main renal or urological diseases were: urinary tract infection 55%, anasarca 11%, acute kidney injury 11%, bilateral hydronephrosis 9%, unilateral hydronephrosis 2% and others. The death rate was 11.21%; loss of sight 8.41 %. **Conclusion:** Kidney diseases are present but under diagnosed in our unit. Poor financial status to make explorations and lack of medical insurance patients explain the delay of diagnosis and patients care. Screening campaigns should be organized for early diagnosis and optimal management hence the interest of a training of medical and paramedical staff for the detection of early signs. **Keywords:** pediatric - nephrology disease- urinary tract infection

The paediatric kidney transplant in the university hospital IBN ROCHD of Casablanca: The review since 2007

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Objectives: The purpose of our study is to review the peculiarities of this type of pediatric operation in university hospital Ibn Rochd of Casablanca. **Patients and Methods:** We retrospectively reviewed medical records of pediatric transplant from January 2007 till December 2016. **Results:** We brought together 19 pediatric transplants; the mean age was of 11.45 years, with a female predominance (57.14 %). The mean weight was of 31.23 kg. Etiology of ESRD was dominated by urological malformations (42.85 %). Transplantation was preemptive in two cases. In 100 % of the patients, the donor was alive. The mother was the donor in 50 % of the cases. A preliminary surgical preparation was made in 64.28% of children with 25% of uretero-vesical reimplantation. Favorable evolution was usual with an average of creatinine's nadir level of 6.03 mg/l and the main complications were the dilatation of calices (12.5 %) and urinoma in one case. **Conclusion:** It is about a growing development in our country that needs cooperation between pediatric surgeons, nephrologist and urologist. **Keywords:** children - transplantation - Casablanca

Cryptorchidie et reins surnuméraires chez un nourrisson de 7 mois de découverte fortuite

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Objectifs: Les auteurs rapportent un cas rare d'association cryptorchidie et reins surnuméraires chez un nourrisson de 7 mois. **Observation:** Il s'agit d'un nourrisson de 7 mois, de sexe masculin, amené en consultation pour une rhinorrhée et une toux sans fièvre évoluant depuis 3 jours. Ses antécédents familiaux étaient non contributifs ; la mère âgée de 25 ans, G1P1001 et le père de 32 ans. Il n'existait pas de consanguinité. Les antécédents prénataux retrouvaient une grossesse normale et bien suivie. Les échographies prénatales étaient normales, sans anomalie morphologique fœtale. L'accouchement était normal à terme avec un poids de naissance de 3300g. L'allaitement maternel était exclusif jusqu'à 6 mois, la diversification alimentaire était en cours. A l'examen physique, son poids était de 8,940 kg, avec un PC de 45 cm, un PB de 15 cm et une taille de 70 cm, les acquisitions psychomotrices étaient normales et il était noté une absence du testicule droit dans la bourse homolatérale. L'échographie abdomino-pelvienne montrait une cryptorchidie droite dans le canal inguinal et 3 reins surnuméraires dont 2 reins droits (lombaire de 64x33x27 mm et iliaque 53x36x36 mm) et un rein iliaque gauche de 52 mm. Le lavage des narines 6 fois par jour au sérum physiologique a été institué. **Conclusion:** Le rein surnuméraire est une anomalie rare, mal documentée, découvert lors de complications ou fortuitement. La taille des 3 reins reste dans les limites normales pour l'âge, la taille et le sexe de l'enfant à l'échographie. La prise en charge et le suivi de ces reins dépendront de l'imagerie par résonnance magnétique avec injection ou du scanner et de la scintigraphie rénale qui permettront de voir les vaisseaux, les uretères, leurs insertions et surtout la fonctionnalité de chacun des 3 reins. Devant toute cryptorchidie, une échographie rénale doit être de routine. **Mots-clés :** enfant- sexe masculin - cryptorchidie - rein surnuméraire.

Difficultés de prise en charge de l'insuffisance rénale aigue des nouveau-nés et des nourrissons à Yaoundé : étude d'une série de cas.

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Objectifs: Le but de cette étude était de décrire les difficultés rencontrées dans la prise en charge de l'IRA du nouveau-né et du nourrisson à Yaoundé. **Patients et méthodes :** Il s'agit d'une série de cas suivis à l'hôpital gynéco-obstétrique et pédiatrique de Yaoundé de septembre 2016 à janvier 2017. **Résultats:** Nous avons recensé 4 cas d'IRA dont les étiologies étaient respectivement : une crise vaso-occlusive sévère chez une drépanocytaire âgée de 8 ans, 2 cas d'uropathies malformatives à type de valve de l'urètre postérieure chez des nourrissons de 6 et 12 mois ; et un sepsis sévère chez un nouveau-né d'une semaine de vie. L'évolution a été favorable dans le premier cas après correction des désordres hydro- électrolytiques. Dans les 3 autres cas, l'IRA était sévère (stade de défaillance selon la classification de RIFLE pédiatrique) et ne répondait pas au traitement médical institué. En l'absence de la dialyse péritonéale, seul moyen d'épuration extra-rénale chez les nouveau-nés et les nourrissons, les patients sont décédés. **Conclusion:** Ces observations nous font prendre conscience de la nécessité impérieuse de créer une unité de dialyse péritonéale à Yaoundé pour améliorer le pronostic des enfants souffrant d'IRA. Le programme « Saving Young Lives » de ISN installé dans un hôpital situé à 402.3km de Yaoundé (7heures 38 minutes de route) n'est malheureusement pas accessible à la population de Yaoundé. **Mots-clés :** IRA- enfant – dialyse péritonéale – Yaoundé

Hypertension artérielle secondaire à un phéochromocytome : 3 cas pédiatriques

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Objectifs: Nous rapportons 03 observations d'HTA secondaire à un phéochromocytome. **Patients et méthodes :** Nous avons repris rétrospectivement les dossiers des enfants suivis au CHU Charles Nicolle de Rouen, entre 2004 et 2010 pour HTA secondaire à un phéochromocytome. Les données cliniques, biologiques et radiologiques ont été colligées. La recherche étiologique génétique a été réalisée chez tous. **Résultats:** Trois enfants ont été inclus. Tous étaient des garçons. Tous les enfants ont présenté une HTA maligne dont 1 cas d'encéphalopathie hypertensive. Le diagnostic a été apporté par le dosage des catécholamines urinaires de 24 heures et leurs métabolites, complété par l'imagerie. Le diagnostic de certitude était histologique avec 2 phéochromocytomes et une tumeur composite phéochromocytome / ganglioneuroblastome. Tous les phéochromocytomes étaient localisés à droite sans foyer secondaire. Deux cas sporadiques non syndromiques et 1 cas familial génétique lié au gène MAX ont été retrouvés. Avec un recul moyen de 4.5 ans, aucun enfant n'a récidivé. **Conclusion:** La recherche d'un phéochromocytome doit faire partie du bilan systématique lors de l'exploration étiologique d'une HTA chez l'enfant, en raison de sa gravité en cas de retard diagnostique. Les causes génétiques commencent à être mieux connues. **Mots-clés :** HTA- Enfant- Phéochromocytome

Syndrome néphrotique chez l'enfant en milieu hospitalier au Mali

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Objectifs: Etudier les aspects épidémiologiques et cliniques du syndrome néphrotique chez les enfants hospitalisés de 0-15 ans. **Méthodes :** Il s'agit d'une étude prospective descriptive allant du 1er décembre 2012 au 1er décembre 2013 dans le service de Pédiatrie du CHU Gabriel Touré, service de référence pédiatrique au Mali. Le diagnostic du syndrome néphrotique était biologique. **Résultats:** Au total, 120 enfants ont été hospitalisés pour syndrome néphrotique avec un sex-ratio de 2,75. La première poussée de syndrome néphrotique survenait en dehors de l'âge classique (< 1 an et > 12 ans) chez 12% des patients. Le délai moyen de consultation était de 20 jours et 60% des enfants était en anasarque. Les principaux signes à l'admission étaient dominés par l'ascite (100%), l'hématurie (23,3%) et l'HTA (11,7%). L'insuffisance rénale était retrouvée dans 14,2% des cas et la fièvre dans 38%. La durée moyenne de séjour était de 17 jours. Le syndrome néphrotique était cortico-sensible dans 86% des cas et la rémission était partielle dans 10%. **Conclusion:** Le syndrome néphrotique chez l'enfant malien est fréquent et est caractérisé par un recours tardif aux soins. Sa cortico-sensibilité permet d'encourager la population à la pertinence d'un traitement précoce. **Mots-clés :** syndrome néphrotique- enfant- Mali

Valves de l'urètre postérieur : expérience initiale. A propos de 15 cas

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Objectifs: Décrire les caractéristiques cliniques, radiologiques et évolutives des patients présentant une valve de l'urètre postérieur et pris en charge au Cameroun. **Patients et Méthodes :** Il s'agit d'une étude rétrospective sur 4 ans de Janvier 2012 à Octobre 2016 concernant 15 garçons traités pour valves de l'urètre postérieur. **Résultats:** L'âge des patients au diagnostic allait de 1 jour de vie à 6 ans et chez 4 patients le diagnostic a pu être évoqué en anténatal. La symptomatologie était dominée dans 80% des cas par des infections urinaires, dans 60% par une insuffisance rénale aiguë et des troubles mictionnels, dans 20% par une détresse respiratoire et une anémie sévère. L'échographie rénale a été réalisée chez tous les patients et elle était couplée à la cystographie sus pubienne chez 12 patients. Trois patients ont eu une scintigraphie rénale montrant chez 1 patient un rein non fonctionnel. Il existait une urétéro-hydronephrose bilatérale et une dilatation de l'urètre postérieur dans 100% des cas. La vessie était diverticulaire dans 9 cas et 3 patients présentaient un reflux vésico-urétéral. Le traitement a consisté en une incision première des valves chez 3 patients, une vésicostomie puis incision des valves chez 3 patients, un sondage urétral avec dilatation progressive de l'urètre chez 3 patients et 1 patient a bénéficié de la pose de 2 sondes JJ après un cathétérisme urétral. Deux patients ont été perdus de vue. Une évolution favorable a été notée chez 6 patients dont 2 présentant une insuffisance rénale chronique et 7 patients sont décédés de sepsis urinaire. **Conclusion:** Les valves de l'urètre postérieur représentent une pathologie grave pouvant évoluer vers l'insuffisance rénale. Le diagnostic est posé par la cystographie sus pubienne couplée à l'échographie. Le traitement de référence est l'incision endoscopique. La vésicostomie peut être envisagée au stade initial pour lever une situation d'urgence.

Caractéristiques de l'atteinte rénale chez les patients âgés de 0 à 15 ans au CHU du point-G

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Objectifs: L'objectif de ce travail était de décrire les aspects épidémiologiques et cliniques des atteintes rénales chez les patients âgés de moins de 15 ans au CHU du Point-G, principal centre de référence des affections rénales de la ville de Bamako et de l'intérieur du pays. **Patients et méthodes :** Il s'agissait d'une étude descriptive à recueil rétrospectif des données sur une période de 24 mois, chez les enfants âgés de moins de 15 ans hospitalisés et/ou ayant consulté dans le service de Néphrologie et d'hémodialyse. Les patients devaient présenter un marqueur d'atteinte rénale (augmentation de la créatinine plasmatique, anomalie du sédiment urinaire, anomalie échographique ou histologique et/ou une protéinurie significative). Les patients de plus de 15 ans et/ou ne présentant pas un marqueur d'atteinte rénale n'étaient pas inclus. **Résultats:** Les patients âgés de moins de quinze ans représentent 13,82% des hospitalisations (124/897). La tranche d'âge 12-15 ans était prédominante soit 42,7%. Le sex ratio est de 1,06 en faveur du sexe masculin. Le principal motif d'hospitalisation était le syndrome œdémateux (46,8%). L'atteinte rénale dans cette catégorie d'âge et par ordre de fréquence était : le syndrome néphrotique (33,9%), l'insuffisance rénale aiguë (33%), l'insuffisance rénale chronique (12,1%). **Conclusion:** Si la pédiatrie générale est développée dans les Pays en voie de développement, il faut encourager la néphrologie pédiatrique pour la prise en charge par des spécialistes des enfants atteints d'affections rénales. **Mots-clés :** Enfants - hospitalisation - syndrome néphrotique - insuffisance rénale.

Apport de la bandelette urinaire (BU) dans le diagnostic de la pyélonéphrite aiguë en milieu hospitalier tropical

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Objectifs: Notre objectif est d'étudier la sensibilité et la spécificité de la BU dans le diagnostic des infections urinaires (IU) en pédiatrie. **Patients et méthodes :** Nous avons mené une étude prospective mono centrique et descriptive. Elle a été réalisée entre le 5 janvier et le 30 avril 2016 chez des enfants de 1 à 60 mois, fébriles, hospitalisés, avec des troubles digestifs et/ou des signes urinaires. La BU et l'ECBU étaient systématiques. **Résultats:** Au total, 60 enfants ont été inclus. L'âge moyen était de 12 mois. La BU était positive chez 68,30 % des patients et 68,30 % des patients avaient un ECBU positif. Les leucocytes associés aux nitrites étaient retrouvés à la BU dans 40% des cas et 91,67 % de ces patients avaient un ECBU positif. Lorsque les leucocytes étaient isolés (11 enfants), l'ECBU était positif dans 71,40 % des cas. Sur 3 cas de nitrite isolé, un ECBU était positif. La BU avait une sensibilité de 80,49 %, une spécificité de 57,89 %, une bonne valeur prédictive positive de l'IU dans la tranche d'âge de 4 à 60 mois ($0,001 < p < 0,002$). La valeur prédictive négative était mauvaise dans la tranche d'âge de 1 à 3 ans ($p=0,007$). **Conclusion:** L'utilisation de la BU dans notre contexte permettrait un dépistage précoce des IU en pédiatrie, induisant une plus grande fréquence des ECBU. Ainsi pourraient être obtenues des données fiables sur l'IU de l'enfant. **Mots-clés :** BU- enfant- IU- Abidjan

Etude épidémiologique, clinique et microbiologique de l'infection urinaire (IU) en milieu hospitalier pédiatrique tropical

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Objectifs: Notre objectif principal est de décrire les caractéristiques épidémiologiques et cliniques des IU chez les enfants hospitalisés dans notre environnement. **Patients et méthodes :** Nous avons mené une étude prospective monocentrique concernant les enfants de 1 mois à 60 mois, hospitalisés en pédiatrie pour une PNA du 5 janvier au 30 Avril 2016. **Résultats:** Au total, 41 enfants étaient concernés, la tranche d'âge de 4 et 24 mois étant majoritaire (56,10 %). Le sex-ratio était de 3/2. Au plan fonctionnel, il y avait principalement des troubles digestifs (56,10 %). La pâleur (63,40 %) et la malnutrition (22 %) étaient les principaux signes physiques. L'urine était le plus souvent trouble (78 %) avec une leucocyturie (97,5 %) et une bactériurie significatives (100 %) à l'ECBU. Les germes étaient retrouvés chez 37 enfants; les bacilles Gram négatif (94 %) prédominaient avec un profil bactériologique en faveur de E coli (68,40 %). Ce principal germe était résistant à l'amoxicilline dans 76% des cas et à l'acide clavulanique dans 66% des cas, mais restait sensible au C3G dans 70 % des cas. L'échographie rénale réalisée chez 33 enfants avait retrouvé un seul cas de malformation. **Conclusion:** Les IU sont fréquentes chez le nourrisson et restent encore mortelles. Le germe prédominant est E Coli avec un haut seuil de résistance aux antibiotiques les plus accessibles. **Mots-clés:** IU- enfant- E coli- Abidjan

Prévalence et facteurs associés à la protéinurie dans un groupe d'enfants infectés par le VIH/SIDA

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Objectif: L'objectif de notre étude était de déterminer la prévalence de la protéinurie et des facteurs associés chez les enfants suivis pour infection à VIH/SIDA. **Méthodologie :** une étude transversale a été conduite de janvier à juin 2016 chez les enfants et adolescents âgés de 2 à 19 ans et VIH positif sous traitement antirétroviral fréquentant le Centre de Traitement Agréé de l'Hôpital Laquintinie de Douala (CTA/HLD). La protéinurie a été systématiquement recherchée dans les urines des patients à l'aide de la bandelette réactive Combi screen 11 complétée par une mesure quantitative de la créatininémie lorsque celle-ci était positive. Les facteurs associés à la protéinurie ont été recherchés par régression logistique. Les données ont été analysées à l'aide du logiciel Starview version 5.0. et le seuil de significativité était $p < 0,05$. **Résultats:** Sur 300 enfants et adolescents VIH+ recrutés, l'âge moyen était de 11,6 ans avec un sex-ratio de 1,3. en faveur des garçons. Les enfants et adolescents étaient sous TARV en moyenne depuis 77 ± 40 mois et 53,33% de notre série était sous une trithérapie à base de Tenofovir avec une durée moyenne de 9 mois. Près de 5% avaient une protéinurie supérieure à 100 mg/dl. Les enfants de plus de 5 ans avaient moins de risque d'avoir une protéinurie (OR=0,004 ; IC95%: 0,0004055 - 0,472) et plus l'âge était avancé et plus le risque était moindre. **Conclusion:** La protéinurie est peu fréquente chez les enfants et adolescents VIH+ suivis à l'HLD. Ces résultats suggèrent l'importance de la mise sous TARV précoce des enfants et adolescents afin de réduire la fréquence de la protéinurie et le risque d'atteinte rénale.

Mots clés: protéinurie, VIH, enfant et adolescent, Douala

Insuffisance Rénale aiguë au cours du paludisme grave: A propos de 46 cas colligés

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Objectifs: déterminer l'aspect épidémiologique, clinique, Thérapeutique et évolutif de l'IRA au cours du paludisme. **Patients et méthodes:** Il s'agit d'une étude prospective et descriptive de 6 mois (28 février-31 Aout 2016) dans les services de pédiatrie des 2 hôpitaux de référence de la ville de Niamey. Nous avons inclus 46 patients hospitalisés pour insuffisance rénale aiguë fébrile avec une goutte épaisse positive. Les données ont été collectées à l'aide du logiciel Microsoft Excel 2007 puis traitées et analysées par SPSS. **Résultats:** Nous avons recensé 690 patients pour paludisme grave dont 46 avaient présenté une insuffisance rénale aiguë. L'incidence était de 6,6%. L'âge moyen des patients était de 2,5 ans avec des extrêmes de 6 mois et 14 ans. Les 2 sexes sont représentés de manière équitable. La tranche d'âge [0-5 ans] représentait 43 % des patients. La fièvre (98%), les frissons (69, 56%) et les vomissements (67,39%) sont les principaux motifs de consultations. L'oligurie (67%) ; le syndrome urémique (30%) étaient les signes cliniques de l'insuffisance rénale aiguë. Dans 87% des cas l'insuffisance rénale s'est manifesté par une oligo-anurie et dans 13% des cas la diurèse est conservée. Le taux moyen l'urée sanguine était de 27,5mmol/l ; le taux de la créatininémie moyenne était de 543µmol/l avec des extrêmes de 107 et 2709 µmol/l. Une anémie était retrouvée chez 93,47% des patients (N=43) et un syndrome infectieux biologique dans 61% des cas (N=28). Les troubles ioniques à type d'hyponatrémie et d'hyperkaliémie ont été observés dans 65,37% des cas (N=17). Soixante-seize pour cent des patients avaient reçu de l'arthémeter, 17% ont reçu de la quinine injectable et 6,5% de l'artésunate. Les patients avec une oligo-anurie (86,95%) avaient bénéficié d'une réhydratation première associée une diurèse forcée. Chez 23,91% des patients avec diurèse conservée ils ont bénéficié de diurétiques. Seuls 17,39% ont bénéficié d'une hémodialyse (N=8) pour syndrome urémique sévère ou échec à la réhydratation. L'Evolution était favorable avec guérison sans séquelles dans 74% des cas (N=34) ; 7% des patients ont connu une récupération partielle (N=3); 4% des patients ont évolué vers la chronicité (N=2) et 15% des patients étaient décédés (N=7). **Conclusion:** L'IRA au cours du paludisme est une complication grave vue le nombre de décès observés surtout chez les petits enfants. Le pronostic peut être amélioré par la prévention primaire du paludisme ; la prise en charge médicale efficace des complications ou le recours à la dialyse si nécessaire.

Intérêt des anti-inflammatoires non-stéroïdiens dans le syndrome de Bartter

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Objectifs: Décrire l'effet du traitement par anti-inflammatoires non stéroïdiens sur la déplétion sodée et sur les besoins en supplémentation sodique et potassique, ainsi que décrire la tolérance de ce traitement. **Patients et méthodes :** Nous avons mené une étude rétrospective sur 19 malades atteints de syndrome de Bartter confirmé génétiquement, suivis entre le 1er janvier 1994 et le 25 février 2016 dans le service de Néphrologie pédiatrique de l'Hôpital Robert-Debré à Paris. La réponse au traitement anti-inflammatoire était évaluée par le dosage de rénine et aldostérone plasmatiques et par les besoins en supplémentation sodique et potassique. **Résultats:** Ils étaient 10 garçons (52,6 %) et neuf filles (47,4 %), avec un âge médian de quatre mois au diagnostic et de sept mois au début du traitement. Le diagnostic de SB était fait en période post natale dans 16 cas (84,2 %). Les arguments cliniques ayant conduit au diagnostic étaient : l'hydramnios (n=19), les troubles électrolytiques (n=19), l'alcalose métabolique (n=16), l'hypokaliémie (n=11), la prématurité (n=9), la consanguinité (n=7), la déshydratation (n=5), l'antécédent de SB dans la fratrie (n=4), et le retard statut pondéral (n=3). L'anomalie génétique concernait le gène CLCNKB dans 52,6 %, le SLC12A1 dans 26,3 % et le KCNJ1 dans 10,5 %. Les taux de rénine et d'aldostérone étaient élevés chez tous. Sous traitement, il a été noté, une diminution significative ($p \leq 0,02$) des taux de rénine et aldostérone, une diminution significative ($p \leq 0,03$) des suppléments sodique et potassique. Un meilleur contrôle de la kaliémie était observé avec une médiane passant de 2,9 à 3,3 mmol/L sans être statistiquement significatif. L'alcalose métabolique était notée chez tous les malades et elle restait inchangée sous AINS. Onze malades sur 14 avaient une hypercalciurie dont neuf cas associés à une hyperparathyroïdie. Sous traitement, on a observé une diminution significative ($p=0,02$) de la calciurie et une amélioration non significative ($p=0,4$) de la PTH. Le suivi médian était de 69,4 mois. Les complications observées étaient la néphrocalcinose (n=5) et les complications iatrogènes gastro-intestinales (n=4) dues à l'Indométacine. **Conclusion:** Ce travail démontre l'intérêt des AINS dans le contrôle de la déplétion sodée nécessaire au bon équilibre hydro-électrolytique au cours du SB dont la rénine plasmatique apparaît comme un paramètre de suivi et de conduite thérapeutique. Par ailleurs, il ressort également de cette étude que ces molécules jouent un rôle bénéfique sur l'hypercalciurie et sur la correction de l'hyperparathyroïdie qui en résulte. **Mots-clés :** syndrome de Bartter – indométacine – hypokaliémie - alcalose métabolique

Hémodialyse à Libreville : Notre expérience au CHU d'Angondje

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Objectifs: Afin de partager notre expérience dans l'indication de l'hémodialyse, nous avons collecté les données des enfants transférés au Centre National d'Hémodialyse (CNH). **Patients et méthodes :** Nous avons mené une étude rétrospective descriptive. Tous les enfants transférés au CNH pour hémodialyse en 2015 et 2016 étaient inclus. Les données ont été recueillies dans les registres du service de pédiatrie du Centre Hospitalier Universitaire d'Angondje et du CNH. **Résultats:** Au total, 5 enfants ont été dialysés. Il s'agissait de 2 filles et 3 garçons. L'âge moyen était de 9,4 ans. La dialyse avait été prescrite en présence d'une insuffisance rénale aiguë chez 4 enfants et une insuffisance rénale chronique chez 1 enfant. L'évolution a été marquée par le décès de deux enfants : le premier âgé de 5 ans dans un tableau d'œdème aigu du poumon et le deuxième âgé de 2 ans dans un tableau de sepsis sévère. Un enfant est actuellement en dialyse suite à une insuffisance rénale chronique. **Conclusion:** L'insuffisance rénale chronique est rare dans notre service. Seul 1 cas de dialyse était justifié. Il est nécessaire que les pédiatres soient informés des indications de la dialyse chez l'enfant. **Mots-clés :** hémodialyse – enfant - insuffisance rénale.

Prévalence de la protéinurie chez l'enfant infecté par le VIH à Abidjan

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Objectifs: Cette étude avait pour but de déterminer la prévalence de la protéinurie chez les enfants infectés par le VIH à Abidjan en Côte d'Ivoire. **Patients et méthodes :** Il s'agissait d'une étude transversale descriptive bi centrique, menée du 1er Janvier 2013 au 30 avril 2014, ayant inclus les enfants séropositifs âgés de 0 à 15 ans, ayant une protéinurie à la bandelette urinaire puis une microalbuminurie et traités ou non par les antirétroviraux. **Résultats:** Au total, 155 enfants (78 garçons et 77 filles) ont été inclus. la majorité (67,7%) étaient sous ARV dont 74,1% depuis plus de 5 ans. La prévalence de la protéinurie était de 9,7 %, elle était significativement différente entre les 2 groupes traités et naïfs (2,8% versus 24%). Le stade clinique CDC avancé est apparu comme le principal déterminant indépendant de la protéinurie. **Conclusion:** La protéinurie, marqueur précoce de l'atteinte rénale est fréquente chez les enfants infectés par le VIH. La recherche de ce marqueur devrait être systématique dans le suivi des enfants atteints par le VIH afin de prévenir le développement d'une insuffisance rénale chronique. **Mots-clés :** VIH – Enfant – Protéinurie