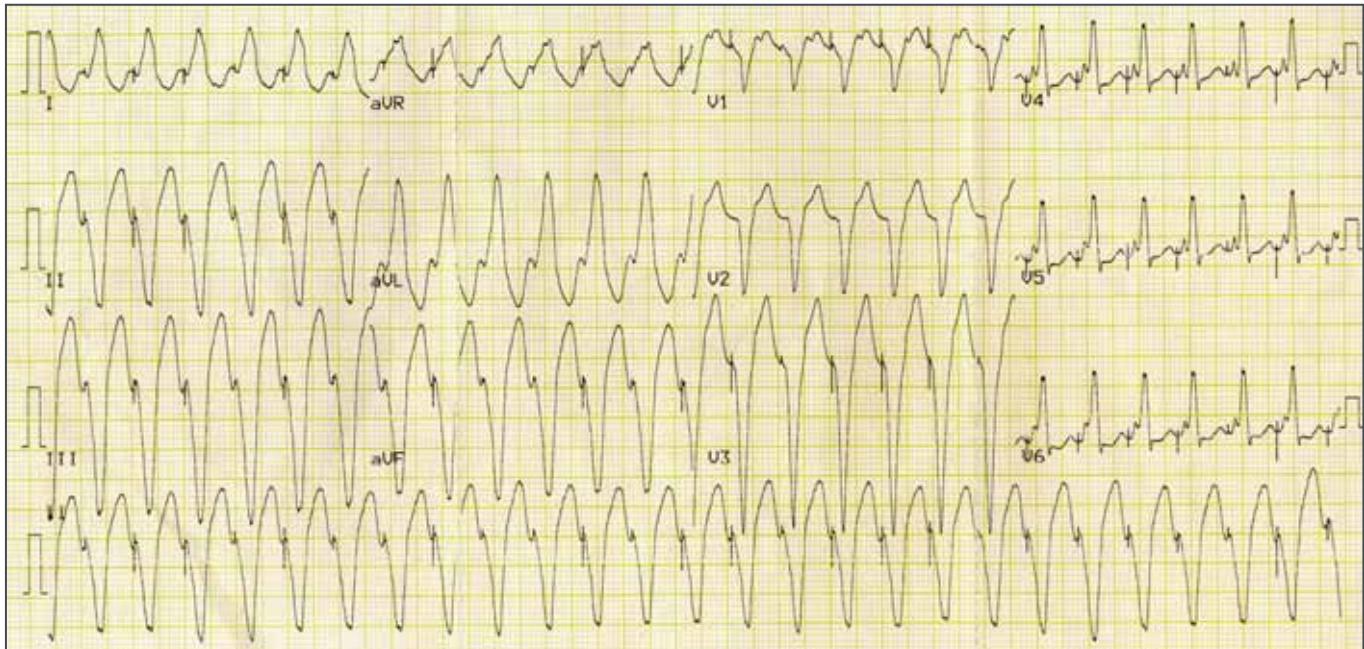


ECG Quiz 24



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A 35-year-old man visiting from another part of the country, arrived at the emergency unit complaining of palpitations he had experienced for a few hours. He gave a history that he had a pacemaker implantation at the age of 25 years, following episodes of dizziness and syncope. Since then he has had two pacemaker replacement operations. He had no pacemaker card and did not remember his diagnosis. He was on no medications. He is very active and normally asymptomatic. These palpitations now were the first ever and not associated with any other cardiac symptoms. An ECG was recorded.

QUESTION 1: Which ONE of the following is the best and most likely ECG diagnosis?

- (a) Ventricular tachycardia with fusion with pacemaker activity.
- (b) Defective pacemaker.
- (c) Pacemaker mediated tachycardia.
- (d) Supraventricular tachycardia with normal pacemaker function.
- (e) Acute myocardial ischaemia.

QUESTION 2: What could you do in the emergency unit to confirm your diagnosis or to make the diagnosis if you are of the opinion that there is more than one correct answer to Question 1?

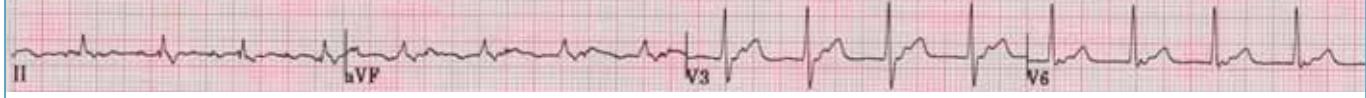
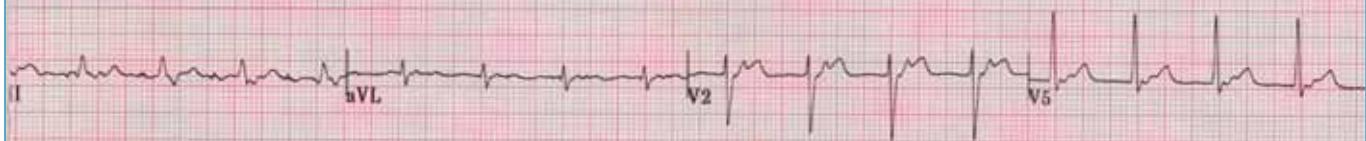
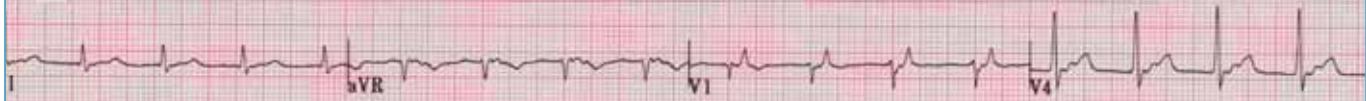
- (a) Troponin level.
- (b) Electrical cardioversion.
- (c) Apply a magnet.
- (d) Administer an IV bolus of adenosine.
- (e) Give amiodarone.
- (f) None of the above.

Please analyse the ECG carefully and commit yourself to an answer before checking the explanation.

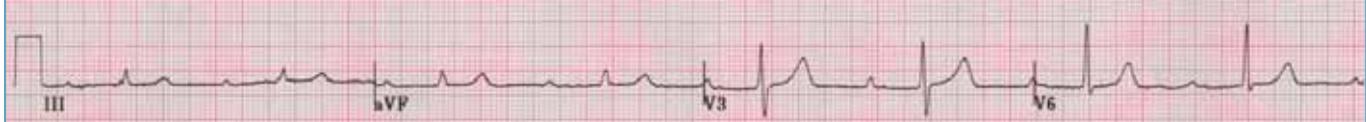
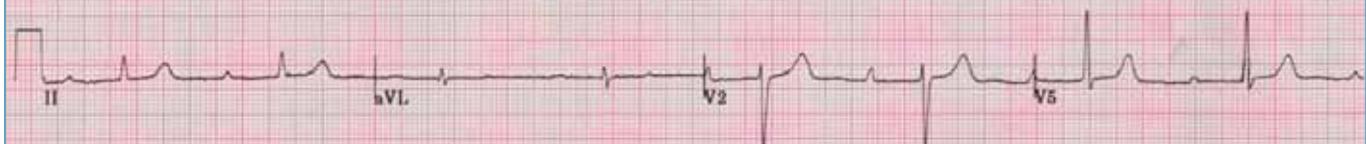
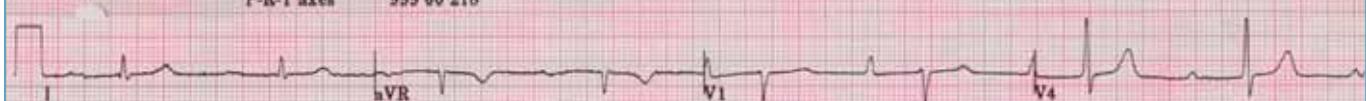
ANSWER on page 192

ERRATUM ECG QUIZ NO. 22

Vent. rate	100 bpm	wide QRS tachycardia
PR interval	0 ms	Nonspecific intraventricular block
QRS duration	164 ms	Abnormal ECG
QT/QTc	352/454 ms	
P-R-T axes	999 61 56	



Vent. rate	100 bpm	Normal sinus rhythm with 1st degree AV block with frequent premature ectopic complexes
PR interval	507 ms	Low voltage QRS
QRS duration	64 ms	Possible Lateral infarct, age undetermined
QT/QTc	352/454 ms	Abnormal ECG
P-R-T axes	999 60 218	



The two ECGs featured in ECG quiz No. 22 published in 2011, volume 8, number 4, page 58 were erroneously displayed at half-size making it difficult to observe the features highlighted in the quiz. The ECGs are reproduced here at the intended size to ensure that all the features discussed can be observed.