

Image in cardiology

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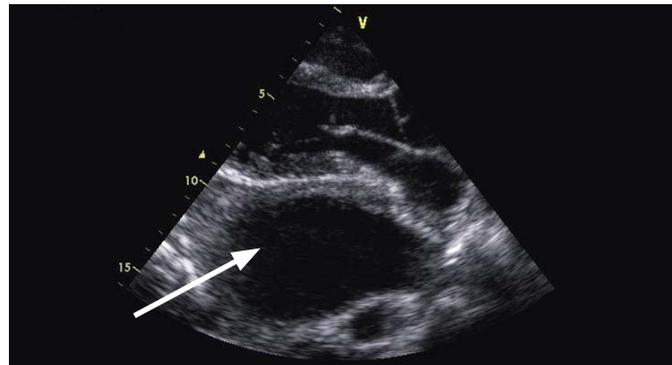
Mediastinal extension of a pancreatic pseudocyst is a rare complication of acute or chronic pancreatitis. There have only been approximately 50 cases described in the literature. Most cases present with atypical chest pain, dysphagia, odynophagia, weight loss or dyspnoea in the context of chronic ethanolic pancreatitis. Mediastinal pseudocysts tract upwards through the oesophageal or aortic hiatuses after initial retroperitoneal leakage. The enzymatic content of the pseudocyst leads to further propagation. At the tissue interface a thin wall of inflammatory tissue is formed. Slow enlargement can lead to a delay in clinical presentation.

Symptoms and complications are related to compression or invasion of surrounding structures, as well as rupture, bleeding and infection of the pseudocyst. Cases of retrocardiac pseudocysts causing pericardial effusion, congestive cardiac failure and acute intra-pericardial rupture have been described. Diagnosis is reliant on clinical suspicion. Chest x-ray may show a retrocardiac opacity or pleural effusion, but is usually non-diagnostic. Definitive diagnosis is made by contrasted CT scan.

Drainage can be done either by laparotomy, transcutaneously under CT guidance or with endoscopy. For uncomplicated cases the endoscopic approach seems to offer least chance of recurrence (5%) or complications (10%).

The echocardiographic images were taken before and after successful drainage of a retrocardiac pseudocyst which caused cardiac compression. The patient, a 44-year-old man, was treated for a pancreatic pseudocyst by the abdominal surgeons and was referred for cardiology due to atypical chest pain, a murmur of mitral regurgitation and an ECG showing extreme axis deviation with inferior Q-waves and poor R-wave progression. He furthermore had pectus excavatum and a left sided pleural effusion which worsened the compressive effects of the retrocardiac pseudocyst. After drainage he improved markedly.

FIGURE 1: Four echocardiographic views demonstrating a large retrocardiac pancreatic pseudocyst.



a.) A parasternal long axis view of the pseudocyst (thick arrow) wedged between the heart anteriorly and descending aorta posteriorly.



b.) A parasternal short axis of the same image shows the left ventricle (thin arrow) being compressed from below by the large pseudocyst.



c.) A parasternal long axis post-operatively where the cyst has been successfully removed.



d.) This parasternal short axis clearly demonstrates that post-operatively the left ventricle has now regained its normal circular shape in short axis.