

Image in cardiology

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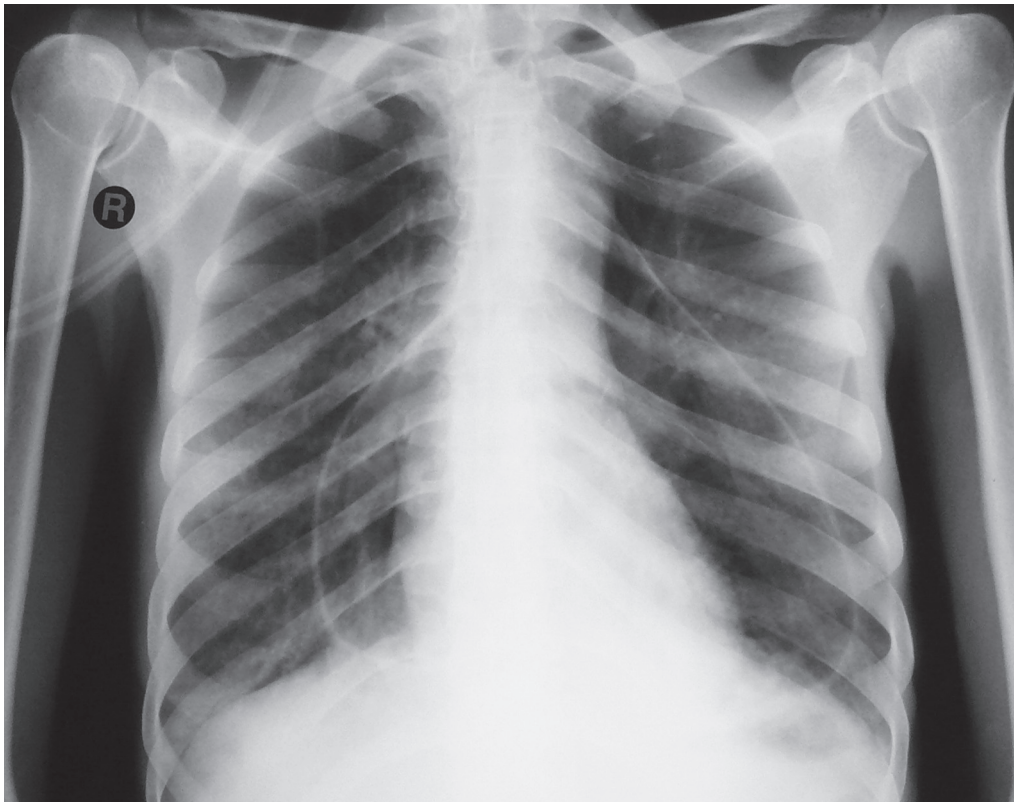
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Pneumopericardium is a rare cause of cardiac symptoms, signs and dysfunction. It is periodically encountered as a result of chest trauma, particularly penetrating chest trauma, and it is also seen with various chest diseases such as esophageal (and gastric) penetrating ulcers, tuberculosis and lymphoma. It may also result from interventions such

as pericardiocentesis, central venous puncture and sternal bone marrow aspiration and has even been reported after dental procedures. It is usually relatively benign, but it must be kept in mind as a cause of unexplained haemodynamic instability in the ventilated patient, as it can lead to a tension pneumopericardium.

Spontaneous idiopathic pneumopericardium attributed to alveolar rupture is exceedingly rare. Most commonly, the onset is signaled by chest pain and associated dyspnea. Clinical examination may not be helpful, but a variety of auscultatory findings may be associated, including soft heart sounds, a pericardial rub or characteristic multiple metallic clicking sounds. In the first report of a pneumopericardium in 1844, Bricheteau referred to the latter as the "bruit de Moulin" reflecting the sounds generated by the floats of a mill wheel.

The image shown here is a chest roentgenogram (CXR) of a young man who presented at a rural hospital with sudden onset chest pain. His physical examination was recorded as unremarkable and he was haemodynamically stable. The CXR was subsequently sent to our Department for advice. The patient was treated symptomatically and monitored for signs of cardiac tamponade. He made an uneventful recovery.



Postero-anterior chest roentgenogram from a patient with a spontaneous pneumopericardium. The heart is surrounded by air outlining the pericardium and the cardiac silhouette. The patient was monitored and the pneumopericardium cleared up without intervention.