

Image Diagnosis: Pericardial Cyst

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A 50-year-old woman presented to the Emergency Department with 5 days of diffuse abdominal pain and constipation. An acute abdominal series was obtained to rule out a bowel obstruction during her workup. The upright chest image of the acute abdominal series demonstrated a smoothly rounded mass at the right cardiophrenic angle (Figure 1). This incidental finding was seen in more detail on her computed tomography scan of the abdomen and pelvis as a sharply demarcated, thin-walled, fluid-filled lesion measuring 7.7 cm in diameter (Figure 2). These radiographic findings were consistent with a large pericardial cyst. Pericardial cysts are rare, usually benign congenital anomalies.^{1,2} The vast majority are asymptomatic and are usually found incidentally on chest radiographs, computed tomography scans, magnetic resonance images, or echocardiography. They represent 6% of mediastinal masses and 33% of all mediastinal cysts.¹ Large pericardial cysts may cause compression on adjacent structures and organs, resulting in dyspnea, chest pain, or persistent cough.³ There have been reports of cyst rupture, cardiac compression, atrial fibrillation, and even sudden cardiac death from these cysts, although these complications are uncommon.^{4,5} Recent case reports have shown that pericardial cysts can sometimes be confused with a coronary artery aneurysm, dextrocardia, malignancy, and even pneumonia.⁶⁻⁹ When surgery is required to remove them, video-assisted thoracoscopic surgery, thoracotomy, median sternotomy, and ultrasound-guided percutaneous aspiration have all been used with success.³ In this particular case, the patient was found to have colon cancer and a mass that was causing a bowel obstruction, independent of the pericardial cyst. A sigmoid colectomy was performed and the patient is undergoing further evaluation for the malignancy. The patient was asymptomatic from her pericardial cyst and nothing further was done from that standpoint. ♦

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Figure 1. Upright chest x-ray from an abdominal series demonstrating a rounded mass at the right cardiophrenic angle.



Figure 2. Computed tomography scan showing 7.7 cm pericardial cyst along the right heart boarder.

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