

A Pericardiophrenic Vein Varix Mimicking a Pulmonary Mass

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A 61-year-old man was presented with a 4-month history of back pain, abdominal distention, and fatigue. His physical examination was unremarkable except for hepatosplenomegaly. Chest radiograph showed a sharply defined mass in the left cardiophrenic angle. A contrast-enhanced computed tomography (CT) revealed two round lesions in the left cardiophrenic angle that were well enhanced with regular borders (Figure 1). The largest mass was the anterior one, and it measured 50 mm in diameter. Azygous and hemiazygous veins were dilated. CT also showed a markedly enlarged inferior phrenic vein (IPV) and anastomosis between IPV and

pericardiophrenic vein (PCPV). Abdominal CT images revealed obstruction of the hepatic and infrahepatic portions of the inferior vena cava with calcified thrombus. Abdominal Doppler ultrasound confirmed the obstruction below the diaphragm. Magnetic resonance angiography clearly demonstrated the enlarged IPV and the mass-like varicose PCPV. When traced upward, the vein passed along the lateral border of the heart and the aortic arch before draining into the left innominate vein (Figure 2).^{1,2}

The imaging suggests that the varicose PCPV is due to obstruction of the normal hepatic venous outflow as a result of thrombosis of the hepatic and infrahepatic portions of the inferior vena cava. The varicose enlargement of the PCPV might represent a diagnostic pitfall because it can be erroneously interpreted as a pulmonary mass. This abnormality should be considered in the differential diagnosis of well-defined paracardiac mass.

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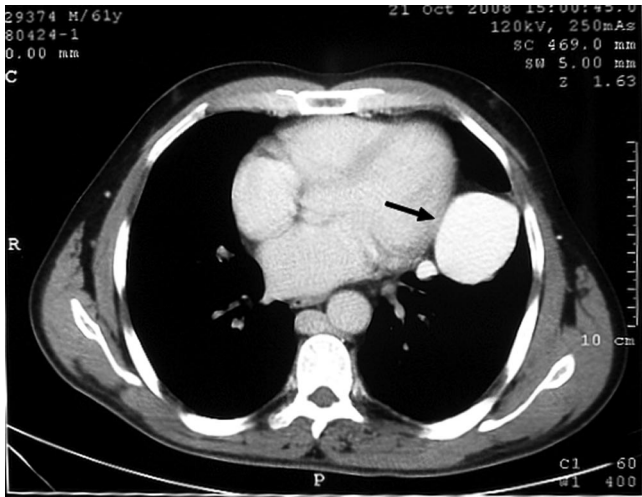


FIGURE 1. Computed tomography (CT) scan reveals a vascular mass (arrow) enhanced at late phase along left border of heart and dilated azygos vein.



FIGURE 2. Magnetic resonance (MR) angiogram shows a dilated inferior phrenic vein (black arrow), a mass-like varicose pericardiophrenic vein (short white arrow) draining to the left brachiocephalic vein (white arrows).