

Transvenous Metastasis to the Heart

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A 50-year-old woman was admitted for acute onset left upper extremity weakness. A brain computed tomography scan revealed two space-occupying lesions in the right lobe, suggestive of metastatic cancer. Chest radiograph revealed multilobar pneumonia involving the right lung, with a suspicious right hilar mass. A chest computed tomography scan revealed a large, complex, 4-cm lobular mass originating within the right middle lobe parenchyma, extending toward the hilum, encasing the branches of the right pulmonary vein and bronchus. There was a suspicion of possible direct erosion of the mass into the left atrium. A transthoracic echocardiography revealed the presence of a freely mobile mass in the left atrium that seemed to originate from the pulmonary veins. Subsequent transesophageal echocardiography revealed the mass to be polypoidal in shape, measuring approximately 3.7 × 3.0 cm, with an irregular surface and a stalk that appeared to originate from the right pulmonary vein. Doppler Color Flow revealed the presence of blood flow into the atrium around the stalk of

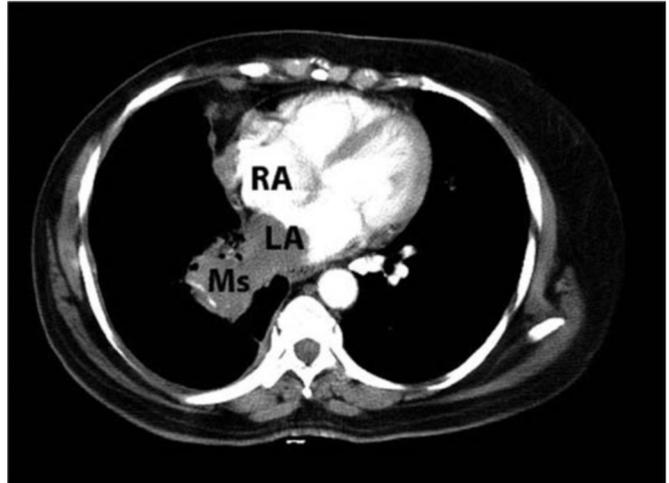


FIGURE 2. Computed tomography revealing the Ms originating from the right lung parenchyma and invading into the LA. Ms, mass; LA, left atrium; RA, right atrium.

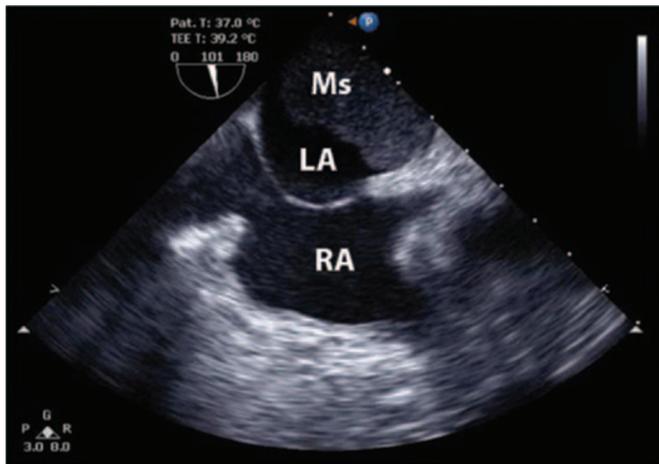


FIGURE 1. TEE in bicaval view. Ms identified in the LA. TEE, transesophageal echocardiography; Ms, mass; LA, left atrium; RA, right atrium.

this mass. Bronchoscopy confirmed the presence of non-small-cell carcinoma of the lung with metastasis to brain, heart, and adrenal glands. The patient decided on comfort care measures only.

Extracardiac tumor metastasizing to the heart via the transvenous route is a rare occurrence.^{1,2} The differential diagnosis of intracardiac mass includes thrombus, vegetation, and a foreign body. However, cardiac tumor (both primary and secondary) should always be included in the differential. Transesophageal echocardiography can prove to be a useful tool in assessments of such patients because of its noninvasive and nonradiating safety profile.

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