Medical Image of the Week: Extensive Small Cell Lung Cancer with Cardiac Invasion

A 73 year old woman was seen with a lung mass and acute onset of ataxia. MRI of the brain was notable for multifocal infarcts (Figure 1). Echocardiography (ECHO) was obtained to identify cardiac source of emboli and was notable for freely mobile mass tethered to the lateral left atrial wall, crossing the mitral valve into the left atrium (Figure 2). A contrast enhanced CT scan of the chest was obtained which confirmed the presence of a large right upper lobe mass with extension to the right pulmonary vein, left atrium and into the left ventricle (Figures 3 and 4). The biopsy confirmed small cell lung cancer.

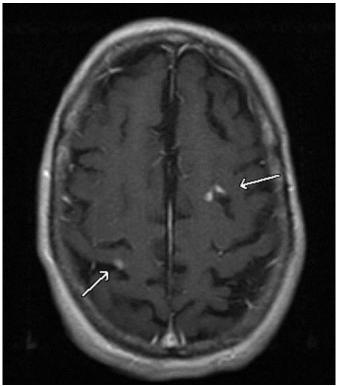


Figure 1. Axial MRI brain showing multifocal embolic infarcts.

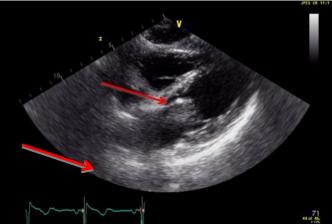


Figure 2. Transthoracic ECHO 4-chamber view showing a mobile mass originating within the left atrium, across the mitral valve, and into the left ventricle.



Figure 3. Axial CT of the chest showing tumor extension into the right pulmonary vein (arrow).



Figure 4. Coronal CT of the chest showing large right apical mass extending into the left atrium and across the mitral valve into the left ventricle (arrow).

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