Thrombus in transit

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A 66-year-old man presented with sudden onset of right arm weakness. Infused computed tomography revealed an acute area of occlusion in the right posterior inferior cerebral artery. Subsequent transthoracic echocardiography demonstrated a large mobile mass in the left atrial cavity prolapsing across the mitral valve leaflets into the left ventricular outflow tract (arrows in Figure 1A). Transesophageal echocardiography delineated a large serpiginous mass traversing the patent foramen ovale (PFO) into the left atrium and left ventricular outflow tract (arrows in Figure 1B). Computed tomography of the chest revealed multiple bilateral pulmonary emboli (arrows in Figure 1C) and a mass in the left lower lobe consistent with an underlying malignancy.

The patient underwent an urgent thrombectomy (Figure 1D) and successful PFO closure under cardiopulmonary bypass.

A paradoxical embolism occurs when a venous thrombus traverses across the PFO, causing an embolic event. Given the high mortality rate associated with paradoxical embolisms, urgent treatment is required, including anticoagulation, thrombolysis and/or surgical embolectomy.

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Figure 1) Ao Aorta; LA Left atrium; LV Left ventricle; PA Pulmonary artery; RA Right atrium

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