Right Atrial Cardiac Varix Mimicking Myxoma: Differentiation Using Three-Dimensional Echocardiography

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Cardiac varices occur mostly in the right atrium and often masquerade as myxomas. Most are incidentally confirmed by pathologic diagnosis. Only about 10 cases in living patients have been reported. We present a 63-year-old woman with a history of paroxysmal atrial fibrillation and thyroid cancer who was admitted with the chief complaint of right facial drooping and left lower extremity weakness. Electrocardiogram showed sinus rhythm. Magnetic resonance imaging of the head revealed a small left periventricular white matter infarct. Real-time three-dimensional transesophageal echocardiogram showed a mobile calcified mass with a long stalk attaching to the lateral wall of the right atrium. The other end of the mass attached to the fossa ovalis (Fig 1A). Transesophageal echocardiogram revealed a calcified right atrial mass (measuring 2.1 × 1.7 cm) with a small echolucent core (as indicated by arrow, Fig 1B), which changed in size during the cardiac cycle, suggesting a patent channel in the core. Transesophageal echocardiogram also showed grade 4 atheroma of the aorta. Computed tomography of the chest showed a right atrial mass with calcification (Fig 2A). The patient had an uneventful surgery. A 1.5-cm bloody cystic mass was resected. Pathologic examination showed the varix as multiple tissue layers with variable thickness and folds with lymphocytes and mononuclear cells (H & E stain, 4×, arrow represents one fold lined with lymphocytes, Fig 2B). Preoperative differential diagnosis between cardiac varix and myxoma is very important to prevent unnecessary varix resection in an asymptomatic patient.

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