

IMAGES IN INTERVENTION

Subacute Massive Pulmonary Thromboembolism

A Rare Delayed Complication After Radiofrequency Ablation

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A 36-year old man had undergone treatment by radiofrequency ablation for supraventricular tachycardia. His electrocardiogram (ECG) after ablation was essentially normal. One month after ablation he noticed mild dyspnea on exertion. Over the next 3 months, this increased and he sought medical attention. When he came to us, 5 months after ablation, he was dyspneic on minimal effort. His ECG showed a prominent R-wave in lead V₁ and right axis deviation, suggesting right ventricular hypertrophy. His echocardiogram showed dilated right-sided chambers and proximal pulmonary arteries with a possible thrombus at the origin of the left pulmonary artery. The interventricular septal motion was paradoxical (**Figure 1A**, [Online Video 1](#)) with reduced right ventricular contractility.

There was moderate tricuspid valve regurgitation and severe pulmonary hypertension (**Figure 1B**). A computed tomography pulmonary angiogram revealed thrombi in both pulmonary arteries (**Figure 1C**) with total occlusion of the left pulmonary

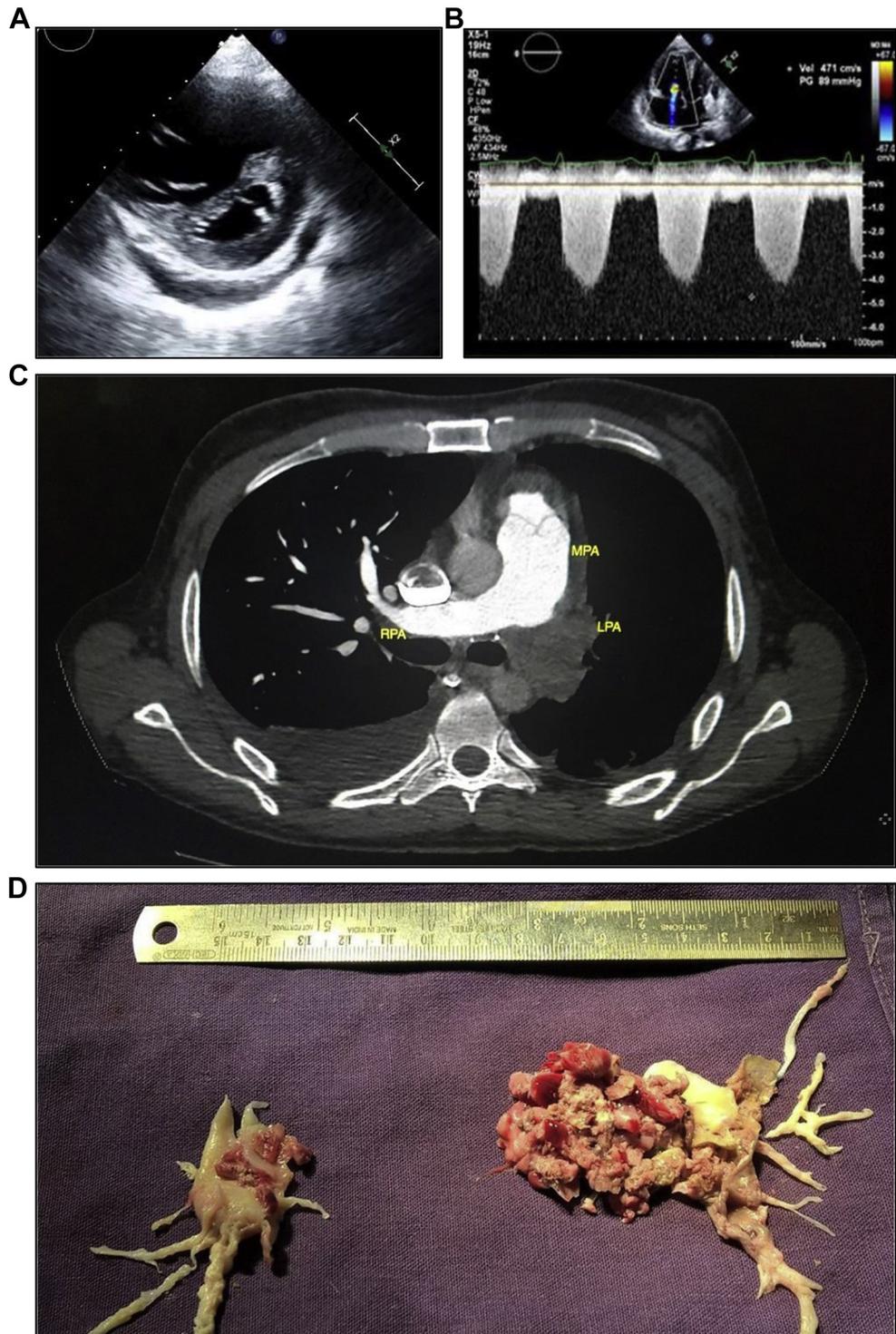
artery. The patient underwent surgical pulmonary thromboendarterectomy with en bloc removal of the left and right thrombi with careful dissection (**Figure 1D**). One week after surgery, his echocardiogram showed near normalization of the right-sided chambers and pulmonary arteries; there was trivial tricuspid regurgitation and no pulmonary hypertension. The patient recovered well and is currently asymptomatic and on warfarin. At the 4-month follow-up, his ECG had normalized. The overall incidence of thromboembolic complications of radiofrequency ablation is <1% (1). Although cases of femoral vein thrombosis after radiofrequency ablation are well documented, cases of pulmonary thromboembolism, as seen in our patient, are rare (2).

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FIGURE 1 Diagnostic Imaging and Excision of Left and Right Pulmonary Thrombi



(A) Echocardiogram, short-axis view. Dilated right ventricle with paradoxical interventricular septum ([Online Video 1](#)). **(B)** Continuous wave Doppler shows moderate tricuspid valve regurgitation and severe pulmonary hypertension. **(C)** Computed tomography pulmonary angiogram reveals thrombi in both pulmonary arteries with total occlusion of the left pulmonary artery and significant obstruction of the right pulmonary artery. **(D)** The excised left and right thrombi after surgical pulmonary thromboendarterectomy.

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 **APPENDIX** For a supplemental video and its legend, please see the online version of this article.

KEY WORDS pulmonary embolism, supraventricular tachycardia, thrombectomy