

Pulmonary vein stenosis after radiofrequency ablation

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A 49-year-old man underwent circumferential radiofrequency catheter ablation of the pulmonary veins to treat atrial fibrillation. The patient presented a favorable clinical course after the procedure. Nine months later, he underwent a chest radiography (Figure 1A), which revealed pulmonary opacities in the left upper lobe. The patient was asymptomatic. Chest computed tomography showed pulmonary opacities and interlobular septal thickening in the left upper lobe (Figure 1B), as well as tapering and filling defects in the pulmonary vein of the same lobe (Figure 1C) and stenosis of the ostium of the left inferior pulmonary vein (Figure 1D). The diagnosis

of pulmonary vein stenosis (PVS) was confirmed. The patient remains under follow-up for disease monitoring.

Radiofrequency catheter ablation has become a widely used intervention in the treatment of atrial fibrillation. PVS is one of the most severe complications associated with this procedure. Most patients with significant PVS are asymptomatic or have few symptoms. Symptomatic patients usually present with dyspnea, cough, chest pain, and/or hemoptysis. The treatment of severe PVS depends on the symptoms and varies from no treatment to balloon dilatation or stent implantation. When such interventions fail, lobectomy may be necessary. (1,2)

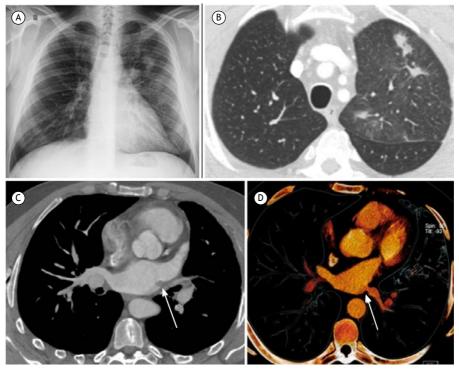


Figure 1. Chest radiography (A) showing pulmonary opacities in the left upper lobe. Axial chest computed tomography (B) demonstrating consolidations, some of which were nodular, ground-glass opacities, and interlobular septal thickening in the left upper lobe, compatible with pulmonary congestion. Axial images acquired at the level of the left atrium showing tapering and filling defects in the pulmonary vein of the left upper lobe (C) (arrow) and stenosis of the ostium of the left inferior pulmonary vein (D) (arrow).

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