## Image in cardiology

Pulmonary Nodules as Presentation of Pulmonary Artery Aneurysm



Nódulos pulmonares como presentación de aneurisma de arteria pulmonar

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Figure 1.

Figure 2.

Idiopathic pulmonary artery aneurysms are a rare and difficult to diagnose vascular entity. Because symptoms are nonspecific or absent, they are sometimes diagnosed as a chance finding on imaging.

We report the case of a 63-year-old female smoker, with no cardiovascular symptoms, who underwent an outpatient study following detection of multiple mediastinal and pulmonary nodules in a preoperative chest radiograph (Figure 1).

As part of the study, we requested positron emission tomography/computed tomography, which revealed that the lesions described on radiography corresponded to marked dilatation of the pulmonary artery, up to 57 mm in the main trunk, affecting both main branches (Figure 2A), with an aneurysmal focus in the right upper lobe, with a 26-mm diameter (Figure 2B).

We extended the study to transthoracic echocardiography, which showed no pulmonary hypertension, valve disease, or left ventricular dysfunction; we administered multiple injection s of agitated saline serum, but observed no intracardiac or extracardiac shunt. We also ruled out traumatic, inflammatory, and infectious causes.

The treatment of pulmonary artery aneurysms is controversial. In this case, since the patient was asymptomatic, and considering the idiopathic etiology, with aneurysm size < 60 mm without right ventricular dysfunction or associated shunt, we opted for conservative management with close monitoring.

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