

## IMAGE IN CARDIOLOGY

## Pulmonary arterial aneurysm in a pulmonary hypertension patient

### Aneurisma da artéria pulmonar num doente com hipertensão pulmonar

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A 39-year-old female with long term idiopathic pulmonary arterial hypertension (PAH), under triple pulmonary vasodilator therapy, was evaluated at our Pulmonary Hypertension Unit. Due to lack of recent imaging assessment, a transthoracic echocardiogram and a cardiac magnetic resonance were performed. They revealed right heart dilatation,

severely dilated pulmonary artery branches and an aneurysmatic pulmonary trunk, measuring 71 mm along its longer axis (Figure 1A–C). Although risk stratification was low according to the European Society of Cardiology guidelines, the patient was referred for pulmonary transplant. Massive (>50 mm) pulmonary artery aneurysms (PAA) are extremely

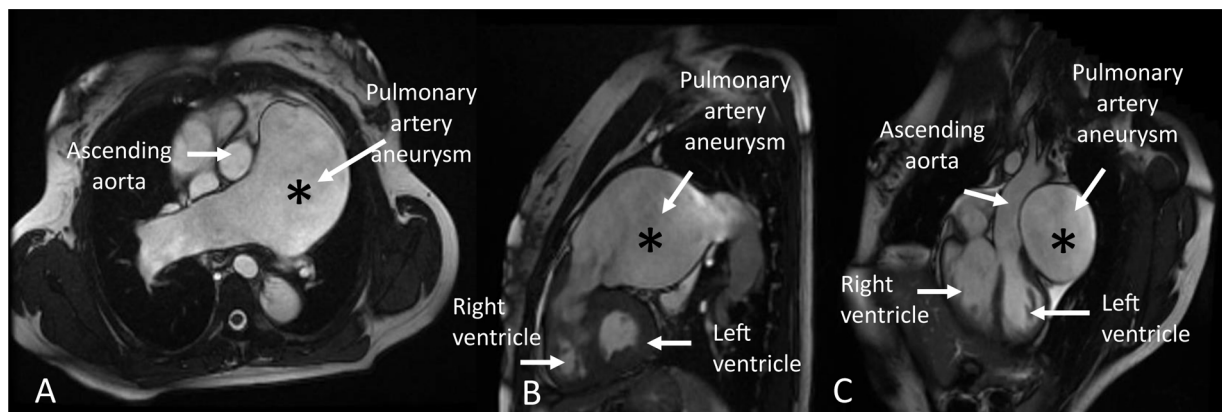


Figure 1

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rare.<sup>1</sup> Their presence in PAH requires exclusion of schistosomiasis (excluded) or associated congenital heart disease.<sup>2</sup> A previously undiagnosed anomalous drainage of a pulmonary vein into the superior vena cava was detected in this patient. Whether this had a role in the development of PAH remains unclear. Given the risk of dissection, rupture or compression of coronary arteries, pulmonary transplant referral is advised.<sup>2</sup>

### Conflicts of interest

None declared.

### References

1. Hritani AW, Samad F, Port SC, et al. Massive pulmonary artery aneurysm. *Circ Cardiovasc Imaging*. 2019;12, <http://dx.doi.org/10.1161/circimaging.118.008677>.
2. Humbert M, Kovacs G, Hoeper MM, et al. 2022 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension. *Eur Heart J*. 2022;43:3618–731.