Pulmonary arterial aneurysm in a pulmonary hypertension patient

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PII: \$0870-2551(25)00095-2

DOI: https://doi.org/doi:10.1016/j.repc.2024.11.015

Reference: REPC 2424

To appear in: Revista Portuguesa de Cardiologia

Received Date: 12 October 2024

Accepted Date: 10 November 2024

Please cite this article as: Lopes JL, Ferreira F, Pulmonary arterial aneurysm in a pulmonary hypertension patient, *Revista Portuguesa de Cardiologia* (2025), doi: https://doi.org/10.1016/j.repc.2024.11.015

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Pulmonary arterial aneurysm in a pulmonary hypertension patient

Aneurisma da artéria pulmonar num doente com hipertensão pulmonar

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TITLE: Pulmonary arterial aneurysm in a pulmonary hypertension patient

DISCRIPTIVE CAPTION

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 71mm along its longer axis (Figures A,B,C). Although risk stratification was low according to the European Society of Cardiology guidelines, the patient was referred for pulmonary transplant. Massive (>50mm) pulmonary artery aneurysms (PAA) are extremely rare¹. Their presence in PAH requires exclusion of schistosomiasis (excluded) or associated congenital heart disease². 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 advised².

Declarations of interest: none

Competing interest: the authors have no competing interest to declare.

REFERENCES

- 1.Hritani, A.W.; Samad, F.; Port, S.C. *et al.* (2019) 'Massive pulmonary artery aneurysm', *Circulation: Cardiovascular Imaging*, 12(4). doi:10.1161/circimaging.118.008677.
- 2. Humbert, M.; Kovascs, G.; Hoeper, M.M *et al.* (2022) '2022 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension', *European Heart Journal*, 43(38), pp. 3618–3731. doi:10.1093/eurheartj/ehac237.

FIGURE (without arrows)

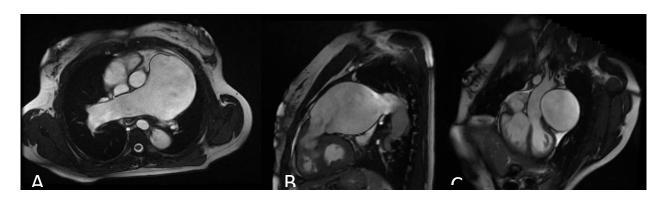


FIGURE (with arrows)

