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Giant pulmonary artery aneurysm in a patient with schistosomiasis-associated pulmonary arterial hypertension

Francisca Gavilanes[1,a], Bruna Piloto[1,b], Caio Julio Cesar Fernandes[1,c]

Dilatation of the pulmonary artery is a feature that is commonly present in pulmonary arterial hypertension, being even more pronounced in cases of schistosomiasis-associated pulmonary arterial hypertension.[1] Aneurysmal dilatations of the pulmonary artery, although less common, have a much greater potential for complications, causing anything from pulmonary artery dissection[2] to extrinsic compression of other regions.

We report the case of a 38-year-old male patient with a > 10-year history of schistosomiasis-associated pulmonary arterial hypertension, with compression of the aorta and coronary artery by a giant pulmonary artery aneurysm. Mean pulmonary artery pressure was 33 mmHg, pulmonary capillary pressure was 10 mmHg, and cardiac output was 6.9 L/min, without evidence of congenital heart disease or lung disease. The patient reported palpitations, dyspnea (categorized as functional class IV), and syncope on exertion. Chest X-ray and chest CT angiography showed a giant pulmonary artery aneurysm (Figures 1A and 1B), without evidence of thromboembolism but with calcifications in the main branches of the pulmonary artery, together with partial compression of the aorta and trunk of the left coronary artery (Figures 1C and 1D). Little is known about the dynamic behavior of such large vascular dilatations,[3] and their potential for complications should always be considered, especially for patients in whom the symptoms are disproportionate to the hemodynamic impairment.

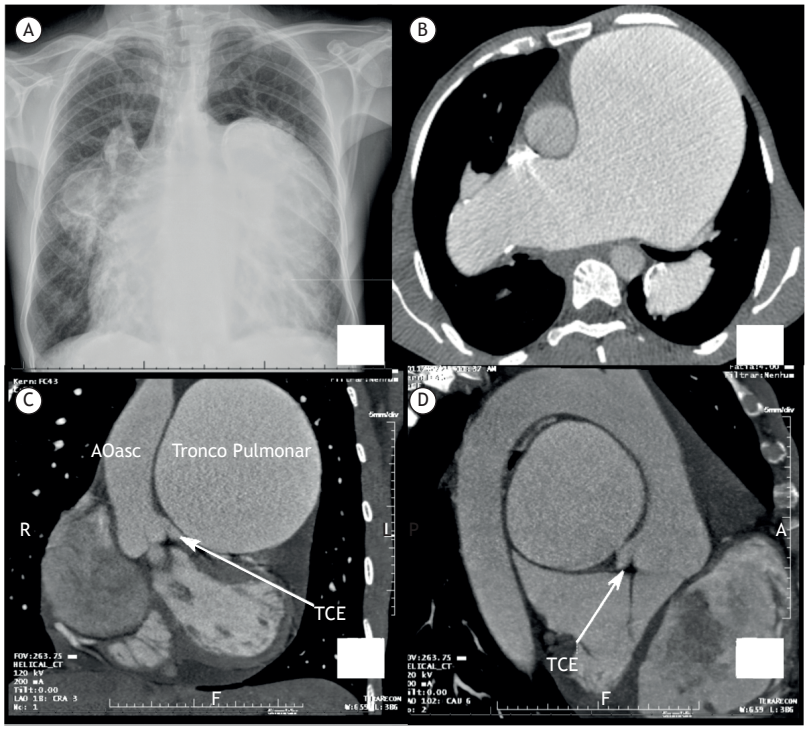

Figure 1. In A, chest X-ray; in B, chest CT scan showing aneurysmal dilatation of the pulmonary artery; and in C and D, CT image reconstruction showing extrinsic compression of the ascending aorta and (white arrows) by dilatation of the pulmonary artery. Designations in Portuguese: TCE, trunk of the left coronary artery; Tronco Pulmonar: pulmonary trunk; and AOasc: ascending aorta.

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1. Unidade de Circulação Pulmonar, Instituto do Coração, Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo, São Paulo (SP) Brasil.
a. http://orcid.org/0000-0002-1385-5222; b. http://orcid.org/0000-0002-8756-0400; c. http://orcid.org/0000-0002-4912-021X