Transient Positional Dyspnea

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The patient was admitted to the emergency room presenting cyanosis and complaining of sudden transient orthopnea, secondary to a supine-position-dependent pulmonary artery compression by an aortic aneurysm (after Bentall-De Bono procedure).

Introduction

The objective of this report is to present a 39-year-old patient who was admitted to the emergency room presenting cyanosis and complaining of severe dyspnea, both strictly related to the supine position, with rapid improvement when the patient assumed a standing position[1]. This is an atypical and curious manifestation that simulates the clinical picture of transient pulmonary embolism[2].

Case report

A 39-year-old male patient was admitted to the emergency room complaining of progressive breathlessness on mild exertion for seven days, with severe orthopnea in the last 48 hours. The patient's dyspnea was strictly related to the supine position, with rapid improvement when he assumed a standing position. During examination, the patient presented tachypnea and cyanosis of the extremities while in the supine position, with an immediate improvement response to standing, with no signs of congestion.

The patient reported a history of polio with onset in childhood, as well as of ankylosing spondylitis, and aortic aneurysm, the latter surgically treated in 2001 by the placement of a valved conduit and a mechanical prosthesis (Bentall-De Bono operation) associated with direct CABG (left coronary artery reimplantation and right coronary artery bypass grafting)[3,4].

A transthoracic echocardiography was performed which revealed a dilatation of the aortic root in comparison to previous echocardiographic controls. An aortic angiography was then performed, which showed contrast extravasation into the aneurysm cavity via the orifice of a prior bypass graft implantation. The extravasation was staunched by an aneurysm sac, which measured 84.49 mm x 100.78 mm in its largest diameter and caused significant compression of the right pulmonary artery when the patient assumed the supine position, with a residual light of 2.28 mm at the point of smallest caliber (Figures 1 and 2).

The patient underwent surgical correction with aortorrhaphy of the ascending aorta[5], during which he presented a coagulation disorder and had to receive blood products. The coagulation disorder was controlled, and the patient was discharged from the hospital without further complications.

Potential Conflict of Interest

No potential conflict of interest relevant to this article was reported.

Sources of Funding

There were no external funding sources for this study.

Study Association

This study is not associated with any post-graduation program.

Keywords

Dyspnea; cyanosis; supine position; aorta/surgery.

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Manuscript received June 11, 2009; revised manuscript received June 30, 2009; accepted March 23, 2010.

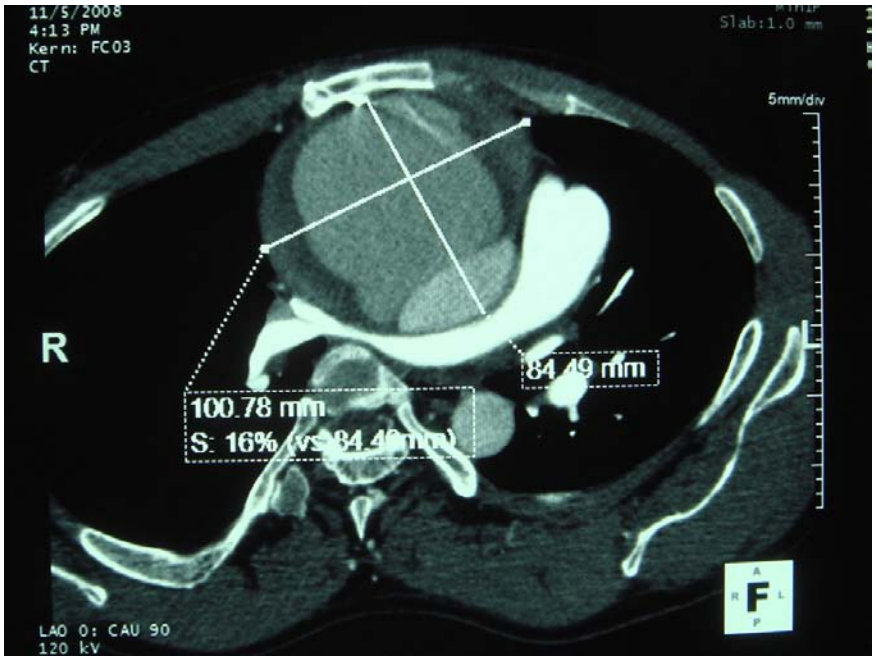

Figure 1 - CT cross-sectional image showing a thoracic aortic aneurysm. Aneurysm measurements in its largest section: 84.49 mm x 100.78 mm.

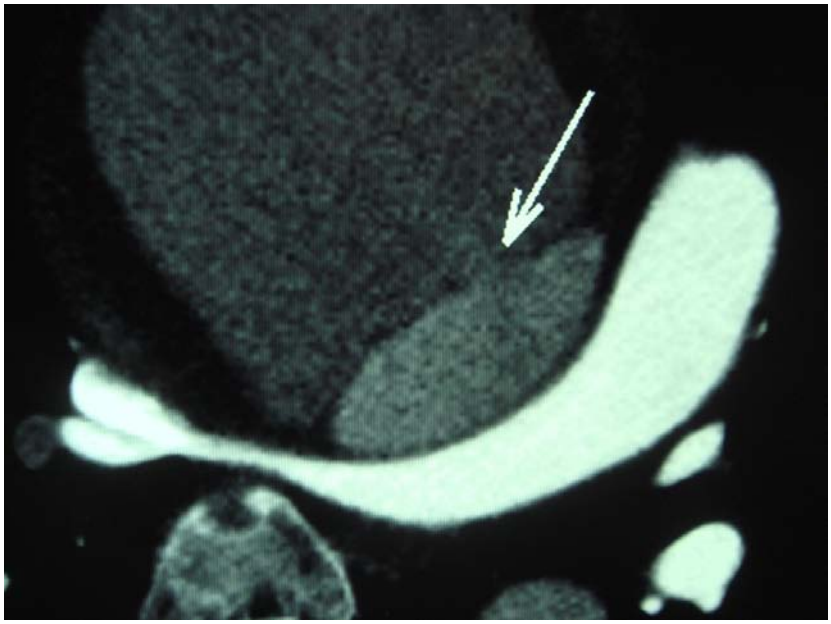

Figure 2 - Rupture point. Contrast extravasation from the true lumen into the false lumen of the aneurysm and a significant compression of the right pulmonary artery, with a residual diameter of 2.28 mm.

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