

Giant Aortic Root Aneurysm Presenting as Acute Type A Aortic Dissection

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Abstract

A 49-year-old woman with four months of increasing episodic palpitations, chest pain, and shortness of breath presented to an outside clinic where a new 4/6 systolic ejection murmur was identified. A transthoracic echocardiogram revealed a large aortic root aneurysm. The patient underwent emergent repair of the dissected root aneurysm with a modified Bentall procedure utilizing a #19 St Jude Valsalva mechanical valve conduit. Postoperatively, she required a permanent pacemaker placement. Her echo showed ejection fraction improvement from a preoperative 25% to a postoperative 35%. She was discharged home on postoperative day 7.

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Key Words

Aneurysm · Aortic root · Bentall procedure

Case Presentation

A 49-year-old woman with four months of increasing episodic palpitations, chest pain, and shortness of breath presented to an outside clinic where a new 4/6 systolic ejection murmur was identified. She was then evaluated with a transthoracic echocardiogram which revealed a large aortic root aneurysm. The patient had no family history of connective tissue disease and failed to meet any of the revised Ghent criteria for

Marfan syndrome. Computed tomography revealed a $9.3 \times 8.9 \times 11.1$ cm aortic root aneurysm with Stanford Type A dissection (Figs. 1 and 2), one of the largest ever reported. The patient underwent emergent repair of the dissected root aneurysm with a modified Bentall procedure utilizing a #19 St Jude Valsalva mechanical valve conduit. The original trileaflet valve was grossly incompetent due to root dilatation and could not be spared. Pathology showed an intimal tear at the noncoronary sinus of the aortic root. Postoperatively, she required a permanent pacemaker placement. Her echocardiogram showed ejection fraction improvement from a preoperative 25% to a postoperative 35%. She was discharged home on postoperative day 7.

Conflict of Interest

The authors have no conflict of interest relevant to this publication.

Comment on this Article or Ask a Question

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Figure 1. Sagittal computed tomography of chest, abdomen and pelvis demonstrating a giant aortic root aneurysm with Stanford Type A dissection, compressing and displacing the right ventricle.

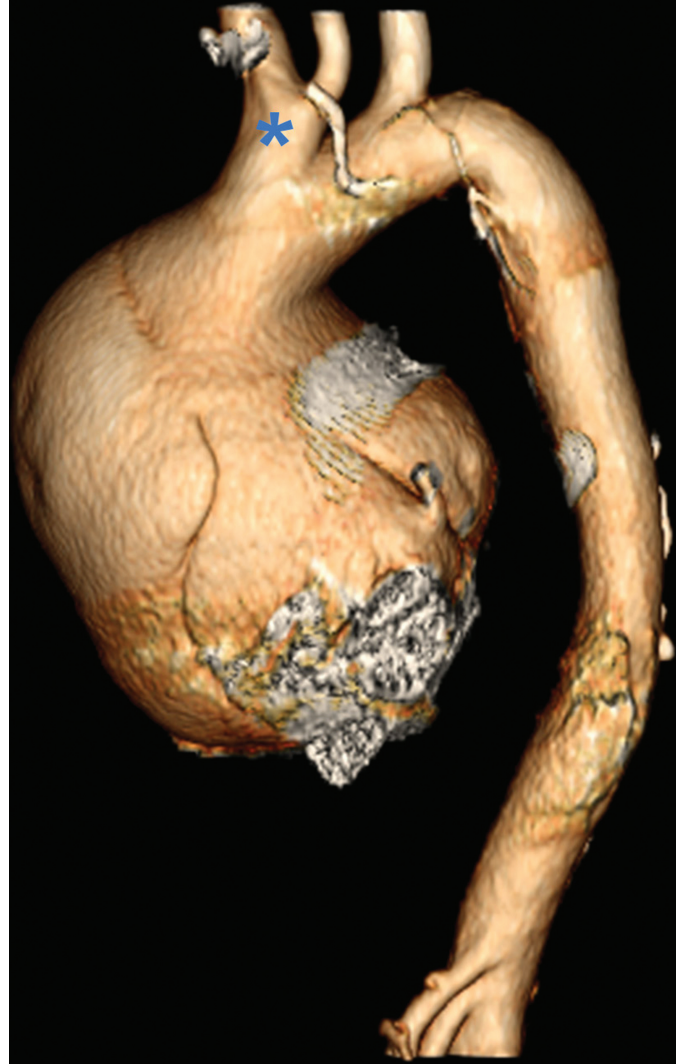


Figure 2. Computed three-dimensional reconstruction of the giant root aneurysm. A bovine arch anomaly is also seen (asterisk).