

Images in paediatrics

'Asthma' cured after cardiac surgery

A 6-year-old boy, with no relevant medical history, was seen for recurrent dyspnoea and wheezing. He was found to have a systolic heart murmur. An echocardiogram showed a circular

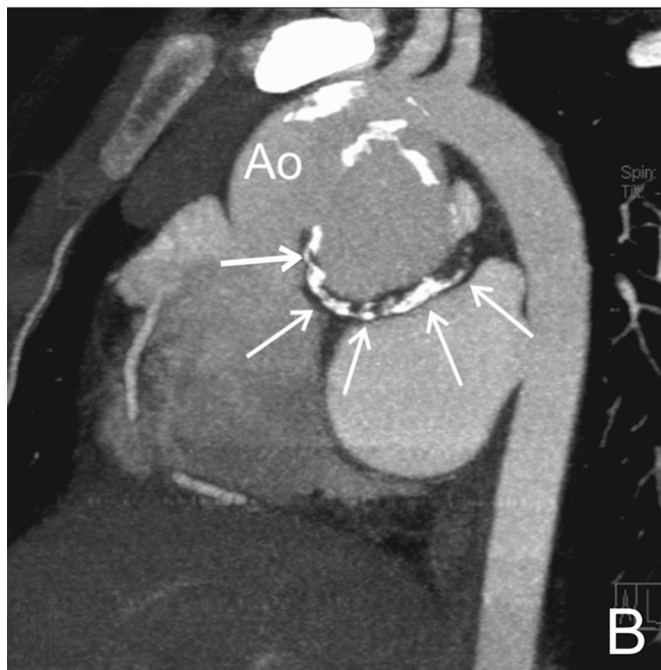
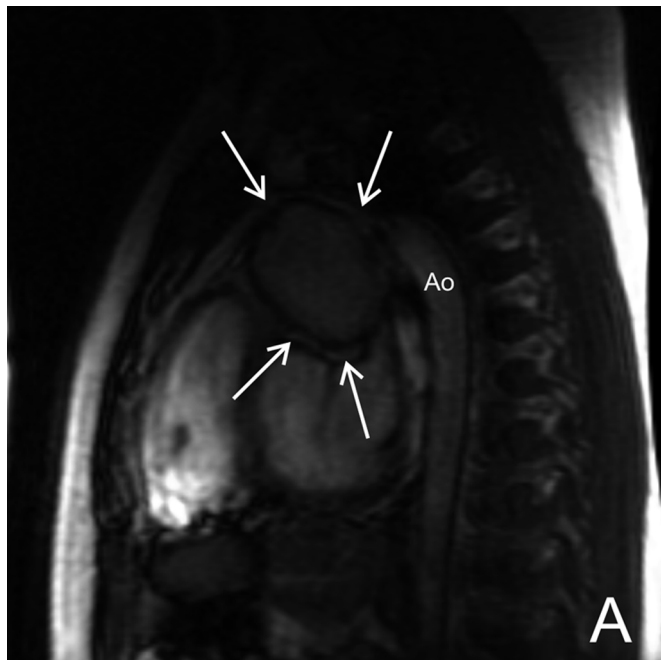


Figure 1 (A) MRI scan revealing the aneurysm location (arrows). (B) CT scan showing a saccular calcified aneurysm (arrows) communicating with the ascending aorta (Ao).

anechogenic image posterior to, and to the left of, the ascending aorta, compressing the pulmonary trunk and right pulmonary artery, with systolic flow into the lesion.

An MRI and multidetector helical CT scan (figure 1) revealed a saccular calcified aneurysm (56×36 mm) communicating with the ascending aorta and compressing the left main bronchus and trachea.

Angiography showed a dominant right coronary artery with compression and retrograde filling of the left coronary. A myocardial perfusion scan revealed reversible perfusion defects in the apex and lateral wall.

Surgical resection and a coronary artery bypass graft were performed. The pathological examination revealed an aortic pseudoaneurysm that was fibrosed and partially calcified (figure 2).

Four years after surgery, the patient is clinically well, without further episodes of dyspnoea or wheezing.

Aortic aneurysms and pseudoaneurysms are very rare in children.¹

Many patients present with non-specific physical findings or symptoms. Our patient presented with dyspnoea and wheezing. Sometimes the first signs are caused by aneurysm rupture.^{2,3} If suspected, the best imaging modalities for diagnosis are MRI or a CT scan.²

Pseudoaneurysms are most commonly associated with trauma or infection.^{1–4} Our patient had no history of trauma or infection, so the aetiology remains unknown. Surgical resection and vessel reconstruction were effective, preventing a catastrophic outcome.



Figure 2 Macroscopic image of the excised aneurysm, with multiple small thrombi attached to the wall.

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