CASE REPORT

Magnetic resonance angiogram 3-D reconstruction in acute aortic transection

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The image demonstrates a magnetic resonance angiogram (MRA), 3-D reconstruction of an aortic transection. The transection can be seen just past the take off of the left subclavian artery. Also demonstrated are the brachiocephalic artery, the left common carotid, both internal mammary arteries, and the thoracic spinal arteries.

Figure 1 Magnetic resonance angiogram 3-D reconstruction showing an aortic transection.

Traumatic rupture of the aorta is one of the most serious complications of blunt chest trauma. In patients with high risk deceleration injuries, radiographic assessment of the aorta is crucial. Both computed tomography (CT) and MR imaging provide aortogram-like reconstruction and also allow assessment of the aortic lumen, the aortic wall, and the thoracic and abdominal viscera, thus they have largely replaced aortography in the diagnosis of aortic pathology.¹ However, mainly owing to accessibility, CT is more commonly used in the acute setting and MRA should normally be reserved for assessing chronic pathology.

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