

## Images in...

## Aneurysm of a coronary vein graft

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## DESCRIPTION

A 75-year-old man with coronary bypass grafts presented with an episode of chest pain, transient lateral ST depression and 12-h troponin of 1 pg/ml. Angiography revealed severe native vessel disease, a patent internal mammary graft to the anterior descending, occlusion of a vein graft to the circumflex and an aneurysm in a vein graft to the right coronary artery. This was approximately 2.5 cm in diameter when measured (figure 1).

His presentation was ascribed to either circumflex graft occlusion or embolisation from the right coronary graft.

A CT scan showed the ectatic graft with a fusiform aneurysm over 6 cm in length and with a diameter of 5.7 × 4.8 cm. Extensive mural thrombus resulted in a residual lumen of 2.6 cm (figure 2).

This meant that angiography greatly underestimated its size.

He remained asymptomatic and was managed conservatively after a multidisciplinary discussion with the surgeons.

Mild aneurysmal dilation of coronary vein grafts is common, with a frequency of approximately 14% within 5–7 years of surgery. Large aneurysms, greater than 2 cm, are rare.<sup>1</sup>

Aneurysms are often asymptomatic and detected incidentally on chest radiography, but may present with an acute coronary syndrome, heart failure, acute rupture or from local pressure complications.<sup>2</sup>

Management strategies include ligation, coil embolisation and implantation of a covered stent.

Angiography can clearly demonstrate them but will not show organised thrombus in the wall, thus if detected patients should undergo further imaging in the form of contrast CT or MRI.

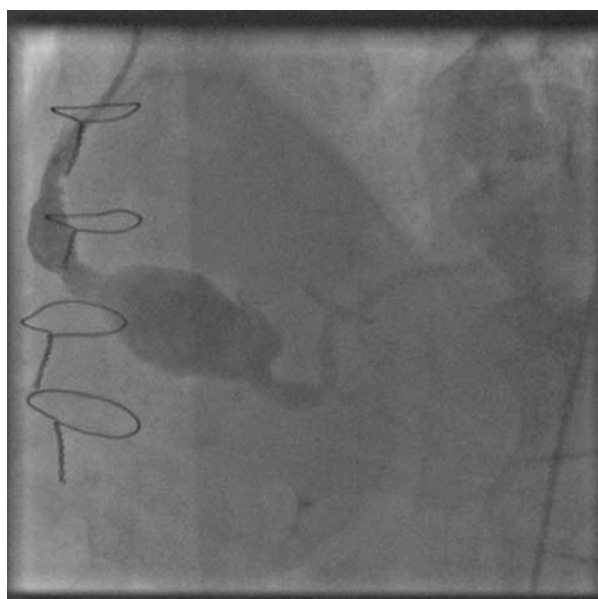
Surveillance imaging is recommended in those conservatively managed.

**Competing interests** None.

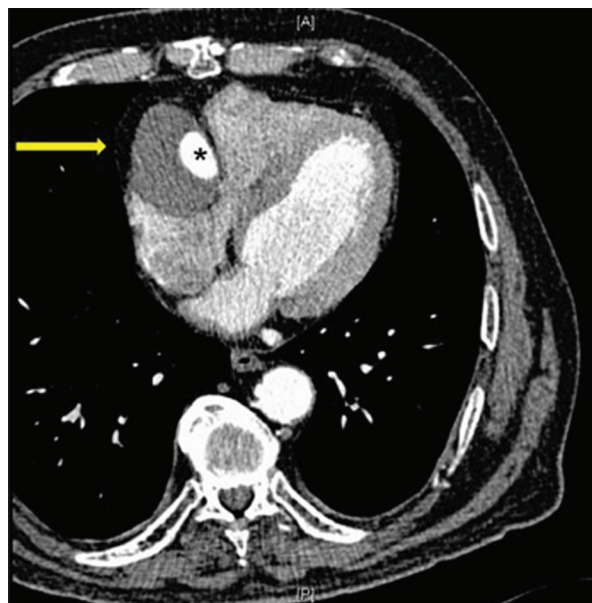
**Patient consent** Obtained.

## REFERENCES

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**Figure 1** Angiography. Saphenous vein graft aneurysm noted to right coronary artery.



**Figure 2** CT chest. Arrow shows aneurysm with large eccentric thrombus and small lumen (asterisk).

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Ainslie M, Brooks N. Aneurysm of a coronary vein graft. *BMJ Case Reports* 2011;10.1136/bcr.12.2010.3605, date of publication

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