Images in...

Saccular abdominal aortic aneurysm: clear cause of exquisite back pain

Richard Peter Owen, Colin Chan

Department of Vascular Surgery, Arrowe Park Hospital, Wirral, UK

Correspondence to Richard Peter Owen, richowen83@hotmail.com

DESCRIPTION

Abdominal aortic aneurysm (AAA) is a well-known cause of back pain.¹ Saccular AAAs are uncommon accounting for 5% of all AAAs.² They can be associated with penetrating aortic ulceration and hence have an increased risk of rupture.³ We present radiological and intraoperative images of a 74-year-old woman presenting with progressive back pain despite increasing analgesia. Her medical history included chronic back pain due to T11–L2 wedge fractures and paraproteinaemia. MRI was performed to further investigate her condition and this revealed a 4 cm infrarenal AAA. Contrast CT imaging characterised this as a 4.3 cm saccular AAA with ulceration into the body of L4 vertebrae heralding an impending rupture. Previous imaging proved rapid expansion from 2.7 cm over the previous 16 months. CT scan from 3 years prior to presentation showed a normal-sized aorta. A white cell labelled scan was performed to exclude mycotic aneurysm and found to be normal. Following investigation, the patient promptly underwent a successful repair of the aneurysm with a tube graft. The extent of vertebral erosion was clear at operation with widespread L4 body destruction and necrotic cancellous bone visible (figures 1 and 2).

Figure 1 Axial contrast CT image showing erosion of abdominal aortic aneurysm into the body of L4 vertebrae above aortic bifurcation (red arrow).

Figure 2 Intraoperative photograph revealing extent of L4 vertebral body erosion (blue arrow) on opening the aneurysmal sac after aortic clamping and haematoma evacuation (the yellow arrow indicates proximal aortic clamp, and the green arrow indicates clamped left common iliac artery).

Learning points

- ▶ Consideration of wide differential diagnoses is important in diagnosing back pain especially when symptoms progress despite analgesia.
- ▶ Radiological evidence of abdominal aortic aneurysm erosion into adjacent structures should prompt expedient action to avoid retroperitoneal or intraperitoneal rupture.

Competing interests None.

Patient consent Obtained.

REFERENCES

1. **Kramer PW.** Back and leg pain secondary to abdominal aortic aneurysm. *Neurosurgery* 1980;**7**:626–8.
2. **Iwai T,** Sato S, Muraoka Y, *et al.* Atherosclerotic abdominal aorta saccular protrusion. *Int Surg* 1996;**81**:189–94.
3. **Nathan DP,** Boonn W, Lai E, *et al.* Presentation, complications, and natural history of penetrating atherosclerotic ulcer disease. *J Vasc Surg* 2012;**55**:10–15.

This pdf has been created automatically from the final edited text and images.

Copyright 2012 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <http://group.bmj.com/group/rights-licensing/permissions>.

BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Please cite this article as follows (you will need to access the article online to obtain the date of publication).

Owen RP, Chan C. Saccular abdominal aortic aneurysm: clear cause of exquisite back pain. *BMJ Case Reports* 2012;10.1136/bcr-2012-006327, Published XXX

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow