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Retroperitoneal fibrosis misinterpreted as an abdominal aortic aneurysm on ultrasound

Daniel Bye, Tom Wiggins, Bernadette Pereira, Stephen Brearley

Department of Vascular Surgery, Whipps Cross University Hospital, London, UK

Correspondence to Mr Tom Wiggins, thomas.wiggins@hotmail.co.uk

DESCRIPTION

A 57-year-old Polish gentleman presented with persistent upper abdominal pain exacerbated by eating. Abdominal ultrasound scan performed in Poland showed a 4.4 cm mass in the region of the abdominal aorta reported as an abdominal aortic aneurysm. Subsequent CT imaging demonstrated a normal calibre aorta, surrounded by a soft tissue mass in conjunction with left-sided hydronephrosis (figure 1). Erythrocyte sedimentation rate was raised at 99 mm/h and C-reactive protein was 43.3 mg/l. Renal function was also deranged (urea 8.7 mmol/l, creatinine 162 μ mol/l). A diagnosis of retroperitoneal fibrosis (RPF) was made. The patient was referred for ureteric stenting and commenced on prednisolone. Retroperitoneal fibrosis is a rare fibrotic reaction, which has an annual incidence of one per 200 000.¹ Around 70% of cases are idiopathic but other

causes include malignancy, inflammatory periaortitis, retroperitoneal trauma, autoimmune disease, irradiation and certain medications (eg. β -blockers, methysergide, methyl-dopa).¹ The commonest presenting symptoms of RPF are abdominal pain (38%) or back pain (40%).² The diagnosis of RPF is often delayed because patients are asymptomatic or symptoms are masked by concomitant disease.³ Ultrasonography has a low sensitivity for the detection of RPF. CT scanning allows assessment of disease extent and affect on adjacent organs.³ In a study of 185 patients with RPF 8% were treated with ureteral stenting, 31% with medication (corticosteroids or tamoxifen) and 57% of patients with both.² In this series, creatinine levels normalised in 68% of cases, and no patients developed end-stage renal failure. Relapses occurred in 12% of patients and 11 patients died.²



Figure 1 Axial CT image showing normal calibre abdominal aorta (arrow 1) with surrounding soft tissue mass representing retroperitoneal fibrosis (arrow 2).

Competing interests None.

Patient consent Obtained.

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

Bye D, Wiggins T, Pereira B, Brearley S. Retroperitoneal fibrosis misinterpreted as an abdominal aortic aneurysm on ultrasound. *BMJ Case Reports* 2011;10.1136/bcr.08.2011.4658, date of publication

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