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Retroperitoneal fibrosis misinterpreted as an abdominal aortic aneurysm on ultrasound

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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 umol/l). A diagnosis of retroperitoneal fibrosis (RPF) was made. The patient was referred for ureteric stenting and commenced on prednisolone. Retropertioneal 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, methyldopa).[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]

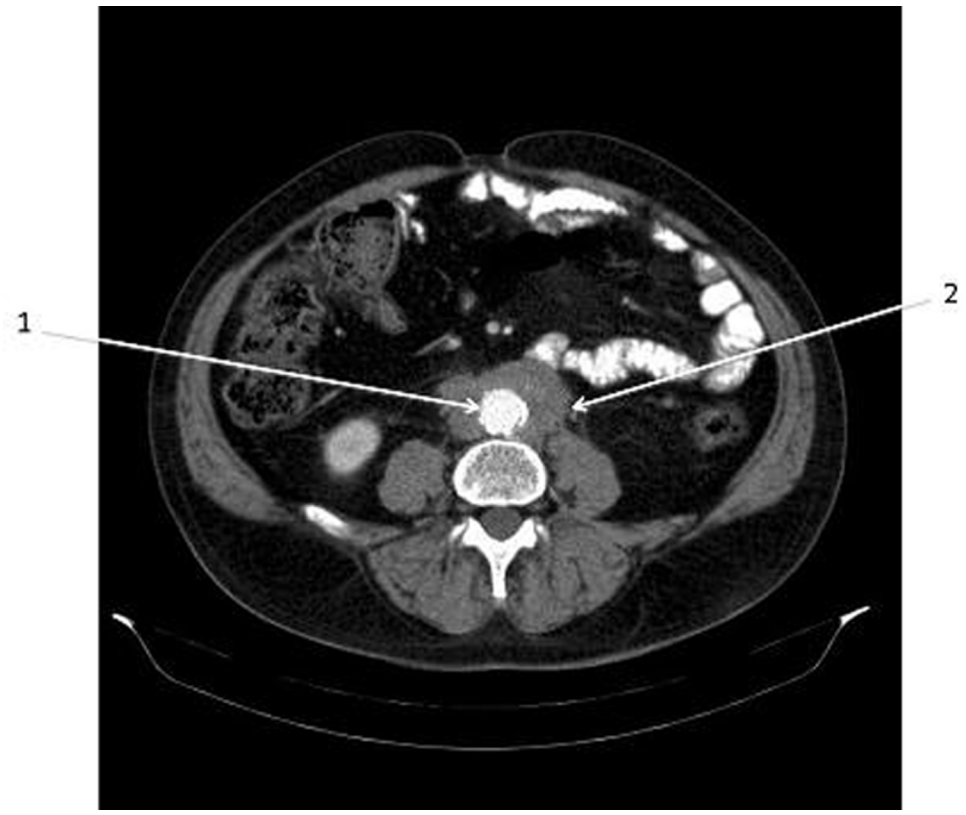

Figure 1 Axial CT image showing normal calibre abdominal aorta (arrow 1) with surrounding soft tissue mass representing retroperitoneal fibrosis (arrow 2).

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Competing interests None.

Patient consent Obtained.

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