Chronic contained rupture of an abdominal aortic aneurysm: an insidious eventuality causing vertebra scalloping in Behçet's disease

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ACTA REUMATOL PORT. 2014:39;193-194

A 38-year-old man was seen due to low back pain and vascular claudication in his lower extremities. On detailed questioning, he declared that he experienced cramps particularly in the right thigh during walking. Both of his complaints were worse with exercise and better with rest; however he mentioned that they sometimes occurred even at rest, especially during sitting for long periods. He had been diagnosed with Behçet's disease (BD) six years ago according to ICBD criteria[1] (positive for oral/genital aphthous lesions and pathergy test). Without any known systemic involvement, he had been under colchicine (1 mg/day) treatment since then. On the contrary, he admitted that he did not comply with his treatment.

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On physical examination, sensory, reflex and motor testings were unremarkable. Palpation of the spinous processes and the vertebral column was not painful. Arterial pulses for the lower limbs were normal. Laboratory tests including erythrocyte sedimentation rate and C-reactive protein were within normal limits. Lumbar spine radiographs demonstrated radiolucency indicating vertebral scalloping in the anterior part of L3 vertebra (Figure 1A). Computed tomography (Figure 1B-C) and magnetic resonance imaging (Figure 2) showed a 39×42 mm chronic contained rupture of an infrarenal saccular abdominal aortic aneurysm (AAA). Electrodiagnostic testing was noncontributory. Upon consultation, the AAA was repaired with a graft by vascular surgeons. Azathioprine 50 mg/d was commenced. Currently, the patient's disease course is quite well under colchicine and azathioprine treatment.

The underlying mechanism of chronic contained abdominal rupture of an AAA is not clearly known; however it is proposed to be related to the tampon effect of the vertebrae on the AAA and the vessel wall throm-

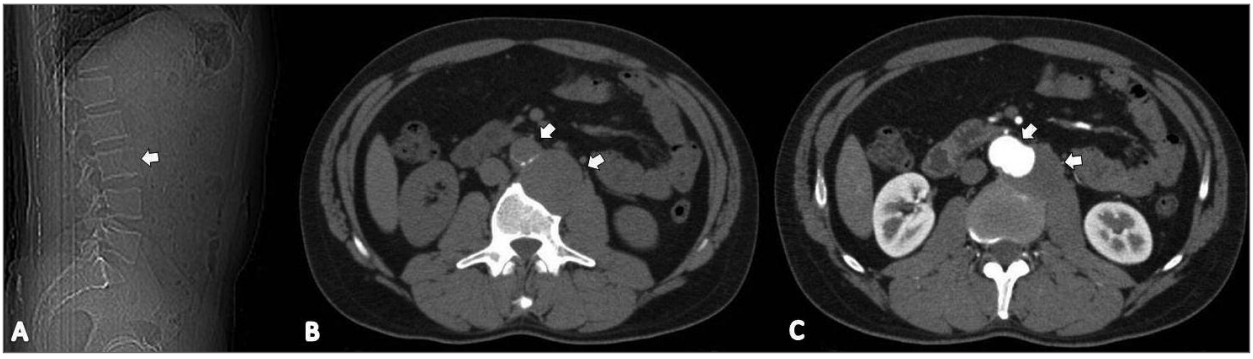

FIGURE 1. Lateral radiograph of the lumbar spine demonstrating the radiolucency in the anterior part of L3 vertebra (**A**). Unenhanced (**B**) and enhanced (**C**) computed tomography showing chronic contained rupture of the saccular aneurysm arising from the abdominal aorta. The aneurysm (39×42 mm) has a mural thrombus causing scalloping in the left anterolateral part of L3 vertebral body.

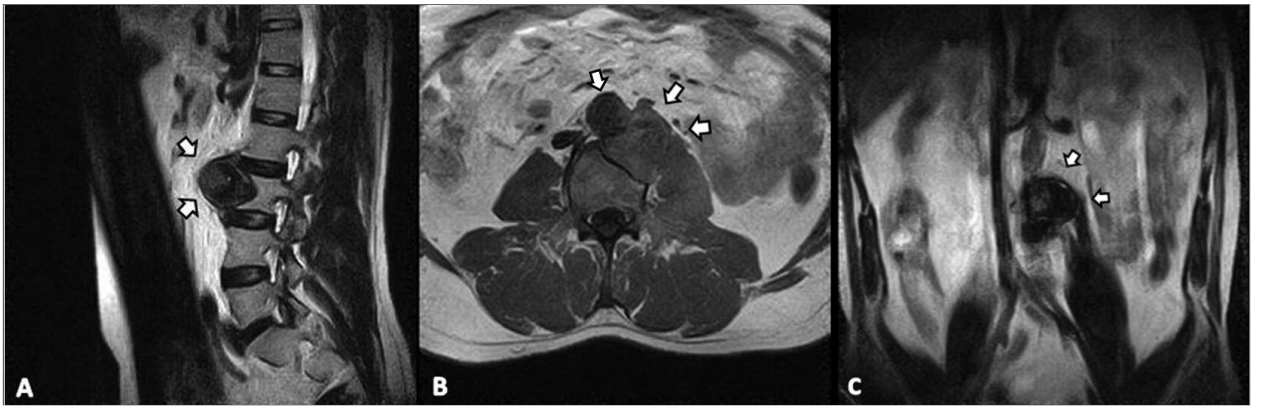

FIGURE 2. Magnetic resonance imaging shows the chronic contained rupture of the aneurysm causing scalloping and lobulation in the anterior part of L3 vertebra on T2-weighted sagittal view (**A**), and displacing the left psoas major muscle on T1-weighted axial (**B**) and T2-weighted coronal (**C**) views. The left psoas muscle has hyperintensity relative to the right psoas muscle on the axial T1-weighted image due to artifact (**B**)

bosis[2]. Similar scenarios have been defined in previous reports, mainly secondary to postsurgical pseudoaneurysms[2-4] but in BD, it is very unusual[5-7]. Over time the aneurysm might have caused a mechanical impact (possibly due to pulsation) on the vertebral body, causing scalloping[5,6]. AAA has been described in BD associated with rupture into the peritoneal or retroperitoneal cavity, causing severe abdominal pain and hemodynamic instability with poor prognosis[6].

Whether or not the lower limb findings are accompanied by low back pain, in patients with BD, clinicians should definitely consider abdominal aortic pathologies in the differential diagnosis of neurological/vascular claudication. Likewise, relevant patients require a careful neurological and physical examination and close follow-up. Otherwise chronic contained rupture of AAA can easily be overlooked due to its nonspecific manifestations. Lastly, aside from prompt diagnosis, optimal management of such aneurysms indisputably necessitate strict disease activity control, a multimodal rehabilitative approach and inevitably surgical treatment (usually a graft repair) in particular cases[2,5,8].

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