



## Images in Clinical Rheumatology

### Abdominal Aneurysm: An Uncommon Cause of Low Back Pain<sup>☆</sup>

### Aneurisma abdominal: una causa infrecuente de dolor lumbar

Álvaro García Martos,\* Marina de los Riscos Álvarez, Cruz Fernández-Espartero

Servicio de Reumatología, Hospital Universitario La Zarzuela, Madrid, Spain



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#### Case report

We present the case of a 73-year-old man. His history of interest includes the absence of allergies to drugs. As cardiovascular risk factors, he had hypertension, diabetes mellitus, dyslipidemia and revascularized coronary artery disease with triple bypass. He had a pacemaker. He came to our department transferred by his general practitioner due to a 5-year history of mechanical low back pain, which, in the preceding 4 months had come to have a mixed rhythm that impeded him from sleeping at night. He was resistant to standard treatment with analgesics of the first and second steps of the World Health Organization pain ladder and nonsteroidal anti-inflammatory drugs.

In physical examination of his spine, we observed minimum scoliosis, negative pressure in the lumbar spine, limitation in flexion and extension in the final stages, with no other abnormalities, and a normal neurological examination. Plain radiology revealed lumbar scoliosis, minor listhesis of less than 20% of L5 over S1, with disk disease, vacuum phenomenon and posterior sclerosis suggestive of arthrosis. The abdominal aorta was calcified, with a considerable dilatation caused by an aneurysm measuring approximately 10 cm in diameter (Fig. 1).

Given this finding, the patient underwent vascular surgery within the next 48 h, with disappearance of the mixed low back pain. Urgent laboratory tests had been performed prior to the operation. They showed a hemoglobin level of 10.3 g/dL, with normal mean corpuscular volume and mean corpuscular hemoglobin; platelet levels and coagulation studies were normal. We found



**Fig. 1.** Anteroposterior and lateral radiographs of the lumbar spine. They show aneurysmatic dilation of the abdominal aorta labeled with a line that measures its transverse axis.

nothing abnormal in the liver function. Serum creatinine was 1.3 mg/dL.

We performed computed tomography of the lumbosacral spine, that showed bilateral spondylolysis in L5 with grade 1 anterolisthesis of L5 on S1. The remaining vertebral bodies had conserved alignment, height and morphology. The diagnosis was L5-S1 interapophyseal osteoarthritis with degenerative disk disease. We observed interbody fusion, vacuum phenomenon and subchondral sclerosis in endplates. Small left posterolateral protrusion that was

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\* Corresponding author.

E-mail address: [alvarogarciamartos@gmail.com](mailto:alvarogarciamartos@gmail.com) (Á. García Martos).

in contact with the thecal sac. The patient underwent aortoiliac repair secondary to treatment of abdominal aneurysm.

## Discussion

The abdominal aorta is the most common site of arterial aneurysms. Aneurysms can be asymptomatic. When symptoms are detected, the clinical approach depends on the site. Risk factors for rupture are tobacco use, hypertension, large size and presence of symptoms.<sup>1</sup>

The indication for surgical treatment in this patient was the large size of the aneurysm and the other risk factors, which implicated a high risk of rupture.<sup>2</sup>

As a conclusion, we should not overlook the causes of lumbar pain that is external to the spine. Low back pain can entail a severe underlying disease, and early treatment can improve the prognosis.

## Ethical Disclosures

**Protection of human and animal subjects.** The authors declare that no experiments were performed on humans or animals for this study.

**Confidentiality of data.** The authors declare that they have followed the protocols of their work center on the publication of patient data.

**Right to privacy and informed consent.** The authors declare that no patient data appear in this article.

## Conflicts of Interest

The authors declare they have no conflicts of interest.

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