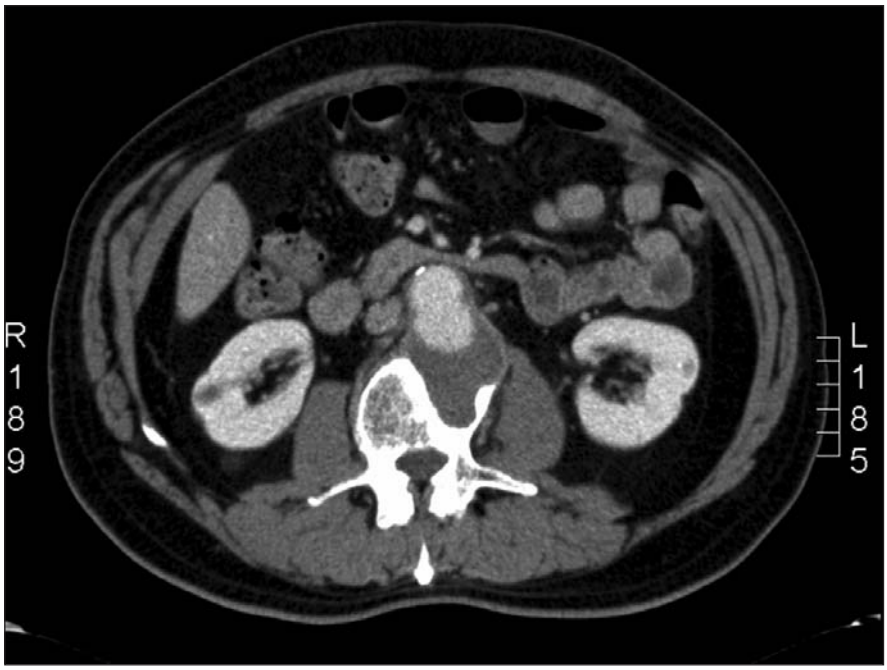
Clinical vistas briefs

## What is your call?




Computed tomography scan of the abdomen of a 67-year-old man with a 6-month history of low-back pain.

See page 996 for diagnosis.

Clinical vistas briefs

# Chronic contained rupture of an abdominal aortic aneurysm with vertebral erosion

A 67-year-old man presented with a 6-month history of low-back pain despite having sought medical treatment. He had no fever, and his blood pressure was 136/64 mm Hg on admission. His abdomen was flat and soft without any palpable mass. There were no neurologic deficits, and peripheral pulses were normal. Results of initial bloodwork, including a complete blood count and measurement of urea and creatinine levels, were also normal. A radiograph (not shown) and a computed tomography scan of his abdomen showed erosion of his third lumbar vertebra (Figure 1). An angiogram revealed an infrarenal abdominal aortic aneurysm 5.2 cm in diameter (Figure 2). During reparative surgery, we found and excised a defect 2 cm in diameter at the posterior wall of the aorta, and we replaced it with a knitted Dacron graft.[1] Pathology confirmed a ruptured aortic aneurysm with organized hematoma. Microbial cultures were negative. The patient's back pain resolved once we repaired the aneurysm.

**Figure 1:** Computed tomography scan of the abdomen of a 67-year-old man showing erosion of the third lumbar vertebra (arrow).

The chronic contained rupture of an abdominal aortic aneurysm is relatively rare (2.7% of operated infrarenal abdominal aortic aneurysms) and occurs when an aortic leak is contained by surrounding tissues.[1] Unlike an acute rupture, which has a mortality of about 60%, the symptoms of chronic contained rupture can be more subtle and include months of back pain. Other symptoms have been described, including obturator neuropathy, obstructive jaundice and groin hernia.[2] Symptoms are attributable to tissue compression or erosion and are most often found in the workup of back pain or an abdominal problem. A thorough clinical and radiological workup is required, and the radiological examination should involve a careful look at all structures surrounding the vertebral body. Computed tomography is the most reliable diagnostic test, and pathology can confirm an organized hematoma.[3]

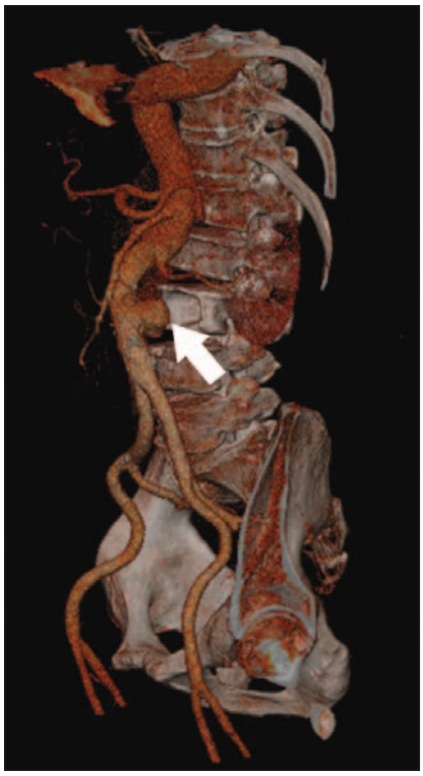


**Figure 2:** Angiogram revealing an infrarenal abdominal aortic aneurysm 5.2 cm in diameter (arrow).

Urgent intervention is necessary because the contained leaks are at high risk for free rupture, with the accompanying high mortality. If detected and repaired, the chronic contained rupture of an aortic aneurysm has a mortality similar to that associated with aortic aneurysms repaired electively. Surgical options include either open or endovascular procedures.

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