

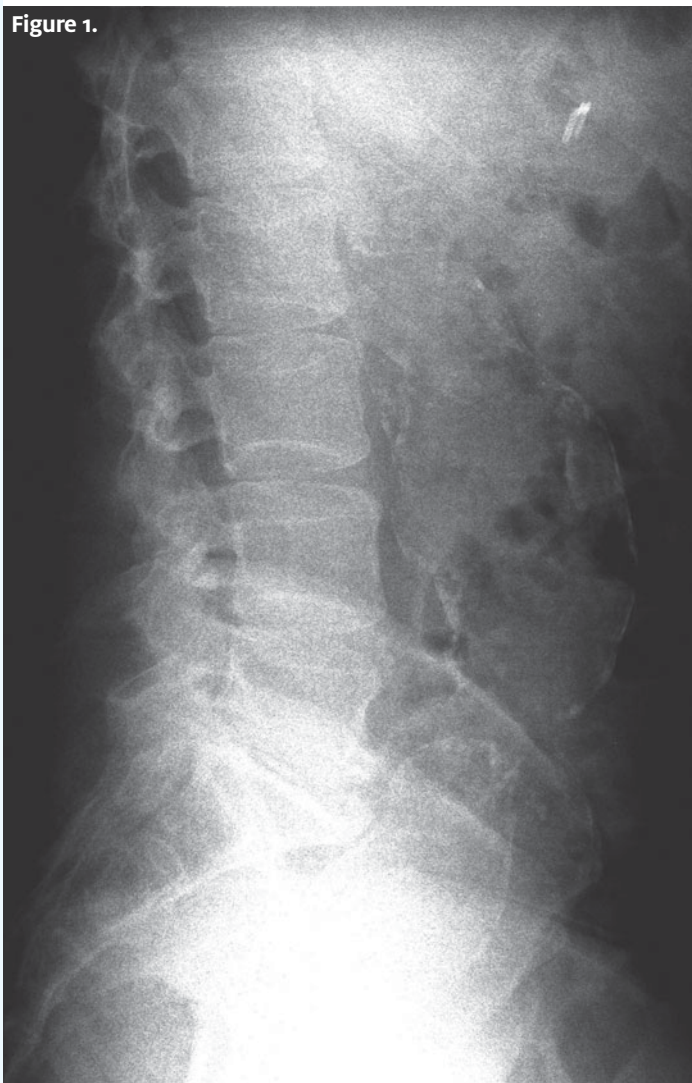


In each issue, *JUCM* will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of conditions that real urgent care patients have presented with.

If you would like to submit a case for consideration, please email the relevant materials and presenting information to editor@jucm.com.

Dull, Constant Back Pain After a Fall

Figure 1.



Case

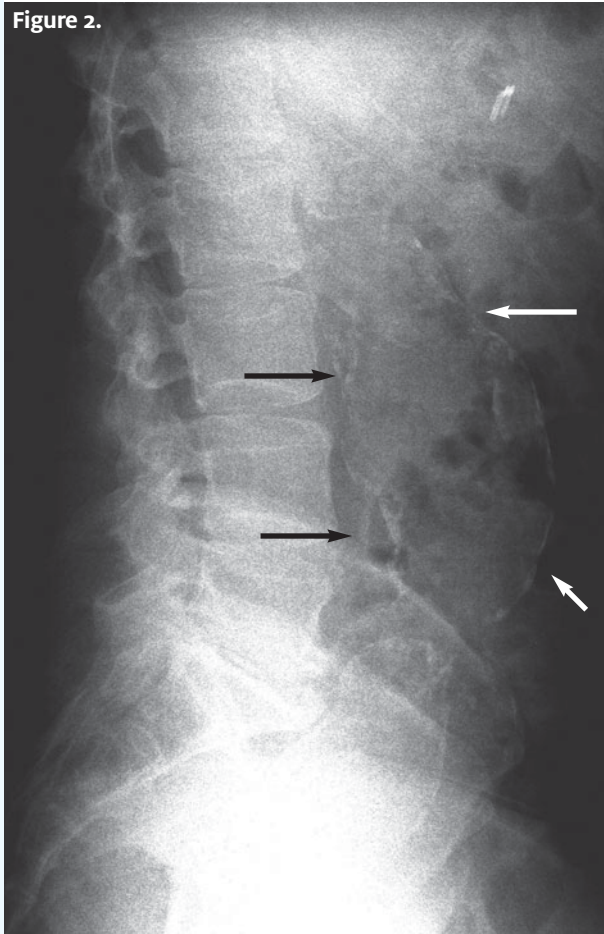
A 67-year-old male presents with acute mid-low back pain following a fall. He describes the pain as “dull and constant.” When asked if the pain is worse with range of motion, he replies, “I think so.”

Physical exam reveals he is afebrile, has a pulse of 102, respirations 20, and blood pressure 122/78. His abdomen is soft and nontender without rigidity, rebound, or guarding; there is no bruising or distention. His back appears normal, though there is mild discomfort with deep palpation in the right low back musculature. The patient denies any pain with motion of the torso. There is no rash or evidence of zoster.

View the image taken (**Figure 1**) and consider what your diagnosis would be. Resolution of the case is described on the next page.

THE RESOLUTION

Figure 2.

**Differential Diagnosis**

- Vertebral fracture
- Spondylolisthesis
- Osteolytic lesion
- Abdominal aortic aneurysm
- Lumbar disc herniation

The differential diagnostic considerations for back pain are broad, and are generally divided into mechanical and nonmechanical:

- Mechanical: Lumbosacral strain, herniated nucleus pulposus, epidural compression syndrome, vertebral fracture.
- Nonmechanical: Renal cell carcinoma, pyelonephritis, ureterolithiasis, zoster, retrocecal appendix, abdominal aortic aneurysm.

Diagnosis

The patient has an abdominal aortic aneurysm (AAA). In the x-ray, curvilinear calcifications are seen anterior to the lumbar spine. These outline the aorta. There is moderate spondylosis at the L5-S1 level, with disc space narrowing. There is no vertebral fracture or focal bone lesion.

Learnings

AAAs occur most commonly over age 50, in men and in patients with a history of hypertension or smoking.

AAA is diagnosed as localized enlargement of the aorta with a diameter >3 cm, or more than 50% larger than normal diameter. There is no role for “therapeutic radiation” with the assessment of nontraumatic back pain.

Pearls for Initial Management and Considerations for Transfer

The classic “triad” of AAA (abdominal pain, hypotension, and pulsatile abdominal mass) is present less than 50% of the time. Surgery is usually recommended with an AAA >5.5 cm in males and >5.0 cm in females.

Urgent care clinicians should transfer patients with new diagnosis of AAA and back pain, hypotension, tachycardia, or diagnostic uncertainty. ■

Acknowledgment: Image courtesy of Teleradiology Specialists.