CLINICAL IMAGES

Abdominal aneurysm diagnosed by plain radiograph

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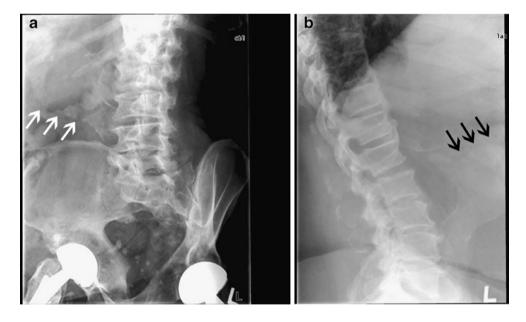
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A 75-year-old male with a history of hypertension and diabetes presented with severe, progressive low back pain over the past 6 months after a fall. His examination was significant for tenderness to his lower back bilaterally, no abdominal tenderness, and a normal neurovascular exam. His vital signs were stable with a blood pressure of 168/97. A radiograph of his lumbar spine was obtained showing no

acute injury, but a large saccular aneurysm (Fig. 1). A computed tomography scan was obtained showing an 8-cm abdominal aortic aneurysm (Fig. 2).

Diagnosing an abdominal aortic aneurysm (AAA) can be challenging and requires a heightened sense of awareness. Most patients are asymptomatic, but can present with abdominal pain, groin pain or back pain [1]. While aneurysms

Fig. 1 (a) Oblique view of lumbar radiograph showing a saccular aneurysm (white arrows). (b) Lateral view of lumbar radiograph showing a saccular aneurysm (black arrows)



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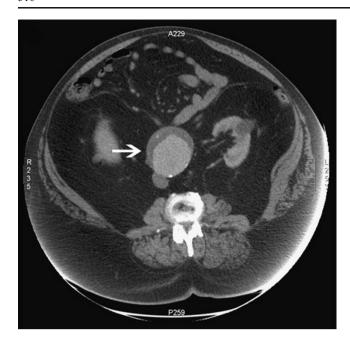
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over 5 cm are palpable on examination, 76% of the time, physical examination is not reliable in ruling out AAA [2].

Bedside ultrasound and computed tomography have been shown to be very accurate in diagnosing AAA. Plain radiographs have limited usefulness in the diagnosis of a ruptured





 $\begin{tabular}{lll} Fig. & 2 & Computed & tomography & scan & showing & an & 8-cm & aneurysm \\ (white arrow) & & & \\ \end{tabular}$

AAA, with characteristic findings of calcified aneurysm, loss of psoas or renal outline, or renal displacement [2]. Treatment is based on stability as well as anatomical considerations. Recent advances utilizing endovascular repair have been shown to be as effective as open repair, with decreased complications associated with endovascular repair [3].

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References

- Upchurch GR, Schaub TA (2006) Abdominal aortic aneurysm. Am Fam Physician 73(7):1198–204
- Haro LH, Krajicek M, Lobl JK (2005) Challenges, controversies, and advances in aortic catastrophes. Emerg Med Clin North Am 23 (4):1159–77
- Schermerhorn ML, O'Malley AJ, Jhaveri A et al (2008) Endovascular vs. open repair of abdominal aortic aneurysms in the Medicare population. N Engl J Med 358(5):464–74

