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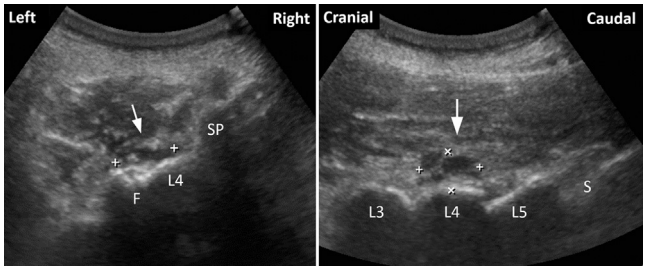

Figure 1. Ultrasonography showing paraspinal hypoechoic collections surrounding by hyperechoic lesions above the left lamina of level L3 to L5 (arrows), suggesting myositis with abscess formation in either the transverse view (left panel) or sagittal view (right panel). *F*, Facet joint; *L4*, lamina of L4; *SP*, spinous process; *L3*, lamina of L3; *L5*, lamina of L5; *S*, sacrum.

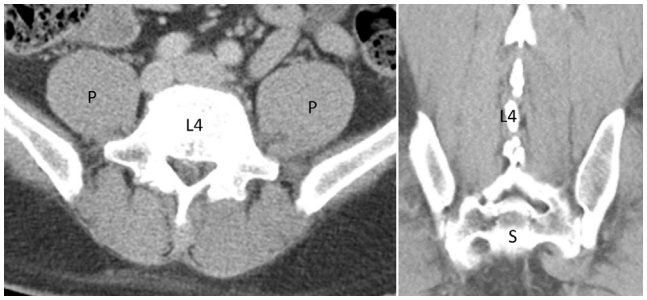

Figure 2. Contrast CT failed to demonstrate paraspinal abscess in both transverse view (left panel) and coronal view (right panel). *P,* Psoas muscle; *L4*, fourth lumbar spine.

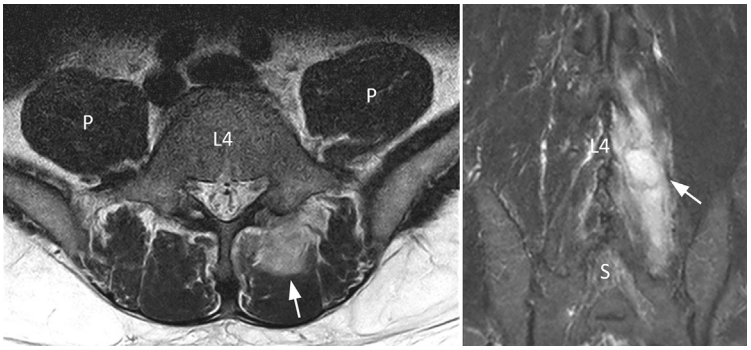

Figure 3. MRI T2-weighted image revealing infectious myositis with abscess formation (arrows) within the left paraspinal erector spinae muscle in both transverse view (left panel) and coronal view (right panel).

[Ann Emerg Med. 2020;76:55.]

A 41-year-old man presented to the emergency department with a temperature of 38.2°C (100.8°F) and a 3-day history of left lower back pain, which worsened with movements and radiated to his left lower abdomen and thigh. He endorsed long-term injection heroin use. Left loin tenderness was noted on examination, but the rest of the abdominal examination result was unremarkable. Urinalysis result was normal. The WBC count was $11.5\times10^3/\mu L$, with a C-reactive protein level of 10.2 mg/dL. The emergency physician performed bedside ultrasonography and found paraspinal lesions above the left L3 to L5 laminae (Figure 1 and Video E1, [available online at http://www.annemergmed.com]). Computed tomography (CT) failed to reveal those abnormalities (Figure 2). The diagnosis was confirmed by magnetic resonance imaging (MRI) (Figure 3).

For the diagnosis and teaching points, see page 84.
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IMAGES IN EMERGENCY MEDICINE

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DIAGNOSIS:

L3 to L5 paraspinal erector spinae muscle abscess. Paraspinal abscesses are rare and often diagnosed later in the disease process, with any delays increasing the risk of paralysis.[1] Common risk factors include diabetes, trauma, previous spinal surgery, immunocompromise, and injection drug use, and patients often present with back pain (71%) and fever (66%).[2,3] Although CT results may be falsely negative, MRI is often required for diagnosis but entails long waiting times. Ultrasonography allows serial follow-up assessments and assists percutaneous abscess drainage.[4,5]

We treated the patient with intravenous antibiotics and he was discharged uneventfully after 4 weeks.

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