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Figure 1. Point-of-care ultrasonography of the hip. Anechoic fluid collection is evident (asterisk) deep to subcutaneous tissue and superficial to gluteus muscle.

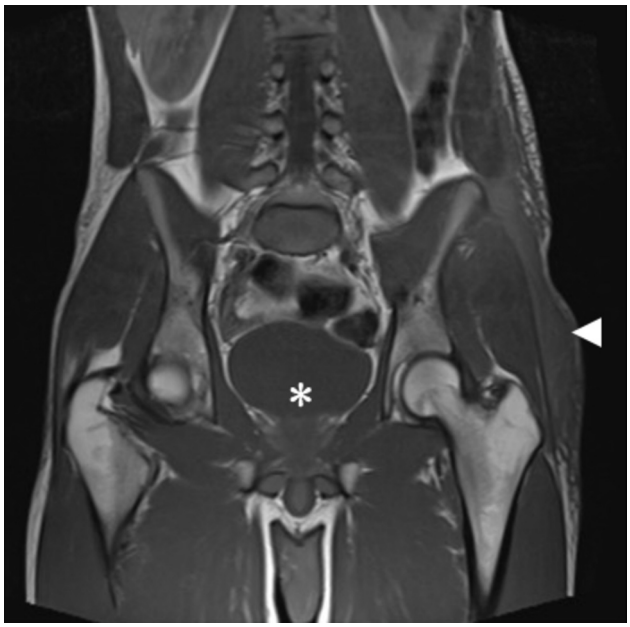

Figure 3. Coronal MRI showing complex fluid collection over the left hip (arrowhead); compare to simple fluid in the bladder (asterisk).

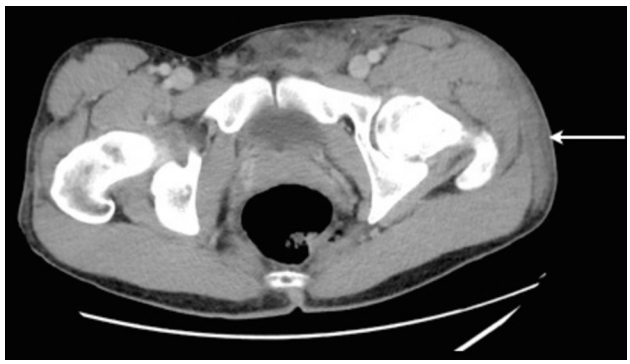

Figure 2. CT demonstrating swelling (arrow), initially interpreted as a contusion over the left hip.

[Ann Emerg Med. 2019;73:e69-e70.]

A 26-year-old man presented with left hip and abdominal pain 1 day after a fall while skateboarding. Physical examination was notable for left lower quadrant and hip tenderness and swelling, as well as inability to ambulate because of pain. Evaluation in another emergency department the day before had revealed mild left hip tenderness, and the patient was ambulatory; radiograph of the left hip and abdominal computed tomography (CT) results were unremarkable. On his second visit, point-of-care ultrasonography (Figure 1), CT (Figure 2), and magnetic resonance imaging (MRI) (Figure 3) of the hip were obtained.

For the diagnosis and teaching points, see page e70.
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IMAGES IN EMERGENCY MEDICINE

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DIAGNOSIS:

Type I Morel-Lavellée's lesion. Morel-Lavellée's lesions are internal degloving injuries involving separation of subcutaneous tissue from the underlying fascia, most commonly after high-energy blunt trauma. They typically occur over osseous protuberances, such as the greater trochanter of the hip. The potential space created by the degloving fills with necrotic fat and hemolymphatic or serosanguinous fluid. Examination findings include a fluctuant soft tissue mass, often with decreased cutaneous sensation and skin hypermobility. The injury is frequently missed on initial evaluation, largely because of the poor sensitivity of CT; it is often mistaken for a hematoma or contusion. The preferred test to make the diagnosis is MRI.[1] Encapsulation and infection of Morel-Lavallée's lesions can complicate the injury and may prompt surgical debridement or antibiotics.[2]

The patient was admitted for pain control and received an abdominal binder; his abdominal pain and tenderness were attributed to the extent of the Morel-Lavellée's lesion. After discharge, he made a gradual recovery to his usual functional status.

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