Traumatic gluteal compartment syndrome (GCS) can result from high- or low-energy blunt trauma. Most cases present with concomitant hip or pelvic fracture. We report a case of traumatic GCS without fracture that was managed using a hybrid strategy that combined angioembolization and fasciotomy.

**Case**

A healthy 52-year-old male was brought to our institution by EMS after being struck by a motor vehicle while riding his bicycle. He was hemodynamically normal on arrival and throughout his course. His primary complaint was severe pain in his right hip that was accompanied by numbness and subjective coolness in the extremity. Exam revealed 0/5 strength and decreased sensation in the right leg with a normal vascular exam. The patient’s right buttock was tensely distended and ecchymotic, and he had severe pain with passive range of motion of the hip. Compartment pressures were not measured. The remainder of the examination was normal. Laboratory evaluation was unremarkable, including a serum hemoglobin of 12 mg/dL. CT scan of the abdomen and pelvis demonstrated extravasation of contrast within the right buttock (Figure 1), suggesting the diagnosis of GCS related to a gluteal artery injury.

The patient underwent emergent selective angiogram of the right pelvis. It demonstrated active extravasation from a distal branch of the right internal iliac artery, thought to be the inferior gluteal artery, into a large pseudoaneurysm cavity in the right buttock (Figure 2). Coil embolization of the bleeding vessel was performed proximally and distally to the site of extravasation; a completion angiogram demonstrated no further filling of the pseudoaneurysm cavity (Figure 3).

The patient was then brought to the operating room, where he underwent right buttock fasciotomies via the middle segment of a Kocher-Langenbeck approach. When the fascia of the gluteus maximus was incised, the muscle was tensely distended and approximately 500 cc of clot was evacuated from the space. No active hemorrhage was noted. The fascia lata also was incised with no bleeding or clot noted. The wound was closed primarily over drains.

Full strength returned to the right lower extremity within hours postoperatively. He was discharged home on postoperative day 7 without residual paresthesia. He was ambulating without assistance within two weeks following discharge.
Discussion
Traumatic gluteal compartment syndrome is a rare and dangerous condition resulting from both high- and low-energy blunt trauma. Diagnosis is generally made through a combination of clinical exam and imaging. The necessity of compartment pressure measurement in this setting is controversial. In a review of 28 cases of GCS, six (21.4%) were traumatic in nature, all of which were managed with surgical decompression alone.

In our patient, we used angiography to identify and control intracompartment hemorrhage, which was followed by surgical decompression. This approach prevents ongoing bleeding at the time of exploration, which may be difficult to control because of an individual patient’s anatomy. It also is superior to immediate decompression in properly selected cases.

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References

Drug-Induced Lupus: Treating One Ailment Can Lead to Another

BY CLAIRE JANSSON-KNODELL, MD, AND MARY JO KASTEN, MD

A 65-year-old male with a history of papulopustular rosacea presented to rheumatology with a six-month history of polyarticular joint pain, night sweats and an unintended 12-pound weight loss. He reported pain in his DIP joints, PIP joints, feet and knees. Associated symptoms included 15 minutes of morning stiffness, dry eyes and subjective weakness. He had no rash, joint swelling or erythema. His pain improved with NSAIDs and time. He had been taking minocycline for papulopustular rosacea for five years. Minocycline was discontinued after consulting an internist about night sweats, so that cultures could be obtained off antibiotics. His arthralgias rapidly improved, and all symptoms were nearly resolved 10 days after stopping minocycline.

On exam his vitals were normal. He was in no distress and appeared well. Skin exam revealed no rash. There was no lymphadenopathy or organomegaly. Cardiopulmonary exam was unremarkable. Musculoskeletal exam revealed no synovitis in any joint; Heberden’s and Bouchard’s nodes were present. His joints had normal range of motion. His motor strength was 5/5 on neurologic exam.

White blood cell and platelet counts were normal. The patient was mildly anemic with hemoglobin of 13.2 g/dL. These labs were obtained prior to discontinuing minocycline and showed C-reactive protein elevated at 46.7 mg/dL and sedimentation rate elevated at 47 mm/hour. Rheumatoid factor and anti-cyclic citrullinated peptide antibody (anti-CCP) were negative. Antinuclear antibody (ANA) was weakly positive at 2.4. Nonrheumatologic etiologies for his positive ANA were considered and deemed less likely by history and physical exam (Table). Additional