

## **An unusual hip injury in a male soccer player**

*Christine A. Marschilok MD, Thomas Jefferson University Hospital*

*Sponsor: Marc Harwood MD*

**HISTORY:** A 15-year-old male high school soccer player presented for evaluation after injuring his left hip during a soccer game three days prior to presentation. He was turning for the ball, planted his left foot with an extended knee and felt a posterior force into his hip. He stated that: "It felt like my hip popped out of place." He experienced acute onset of posterior left hip pain. He was unable to continue playing secondary to the pain. He denied any radiation, distal paresthesias, or weakness at the time or since. He rested over the weekend, took ibuprofen and applied ice, and reported significant improvement of symptoms upon presentation. On presentation, he had mild pain at the left lower buttock region.

**PHYSICAL EXAMINATION:** Examination of the bilateral hips revealed no gross deformity or ecchymosis. Range of motion at the bilateral hips was restricted in internal and external rotation, but equal bilaterally and painless. There was no tenderness to palpation over the left greater trochanter, external hip rotators, left proximal hamstring, or ischial tuberosity. Strength was 5/5 in hip flexion, extension, abduction, and adduction bilaterally without reproduction of pain. There was no tenderness to palpation over the lumbosacral region. Patellar reflexes were 2+ bilaterally. Babinski's was downgoing. Sensation was intact to light touch and equal bilaterally. Gait was normal.

### **DIFFERENTIAL DIAGNOSIS:**

Proximal hamstring injury  
External hip rotator strain  
Referred lumbosacral pain  
Sacroiliac joint dysfunction  
Pelvic ring fracture

**TESTS AND RESULTS:** At the initial evaluation, we suspected an extra-articular source of discomfort. Given the drastic improvement of symptoms in the first three days after injury and lack of significant physical exam findings, we decided to treat conservatively with anti-inflammatories as needed and rehabilitation with gradual return-to-play as tolerated. The patient and his mother were given strict instructions to call or return with worsening or persistent symptoms. He returned to light conditioning and practice without significant increase in his pain. After successfully completing a regulation game, however, he noted slight worsening of his pain. After a discussion with his mother, an MRI was ordered. The MRI of the left hip revealed a transverse, non-displaced posterior acetabular fracture.

**FINAL/WORKING DIAGNOSIS:** Traumatic, low-velocity posterior acetabular fracture

**TREATMENT AND OUTCOME:** He subsequently was given crutches and made toe touch weight bearing. He will follow-up in four weeks to reassess.