

The Pop That Stopped the Soccer Game



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A 13-year-old girl presents with her mother for evaluation of right hip pain following a soccer game two days ago. The patient says she felt a “pop” in her right hip while running and kicking the ball. She was escorted off the field, unable to finish the game.

Since then, she has had pain over the right superior pelvic region. She rates the pain as a 1/10 at rest but 7/10 with ambulation. She is unwilling to bear weight secondary to discomfort and has been using crutches provided by her trainer. She has

been using ice and ibuprofen without relief. Her medical history is unremarkable.

On physical exam, you note a well-developed, well-nourished female in no acute distress. No ecchymosis, erythema, or abrasions can be seen on skin exam. The patient has point tenderness over the right iliac crest. She has mild pain and weakness with hip flexion and significant pain with abduction. The extremity is neurovascularly intact.

A pelvic radiograph is obtained. What is your impression?



ANSWER

The radiograph shows an avulsion fracture of the right iliac crest. While the patient does have a growth plate in this location, there is asymmetry between the right and left sides.

Pelvic avulsion fractures can be easy to overlook and are often misdiagnosed as strains. Providers must remember that the pelvis serves as an insertion site for multiple muscles; in both adolescent and adult patients, certain activities (eg, sprinting, jumping, kicking) can increase tension and result in a bone avulsion. Affected patients typically report a popping sensation, pain with range of motion, and point tenderness over the fracture.

Avulsion fractures can usually be identified on x-ray; CT and MRI are used only when definitive diagnosis is unclear. Treat-

ment consists of conservative management—rest, protected weight bearing, and physical therapy. Surgery is typically reserved for those with > 2 cm displacement of the fracture fragment.

In athletes, a gradual return to sports is advised, with full participation at four to 12 weeks postinjury. Possible complications include recurrent symptoms, prolonged healing time, nonunion, malunion, or hip weakness.

This patient was placed on crutches with non-weight-bearing status for one week. She used OTC pain medication as needed. The patient completed a four-week course of physical therapy and returned to full weight-bearing status. After six weeks, the patient had returned to full activity with pain-free range of motion and full strength. **CR**