The patient was a 20-year-old man who sustained a noncontact left knee hyperextension injury while playing soccer. The patient was unable to bear weight following the injury and presented to the emergency department later that day. Radiographs were completed and interpreted as normal. The patient was then issued a knee immobilizer brace, instructed in a weight-bearing-as-tolerated gait with crutches, and referred to a physical therapist.

When the patient was evaluated by a physical therapist 4 days after his injury, he complained of sharp anterior medial knee pain that limited his ability to bear weight on the left lower extremity. Active and passive left knee range of motion was limited to 0° to 30°, and exquisite pain was noted with palpation of the left medial femoral condyle.

In reviewing the left knee radiographs, the physical therapist noted an abnormally deep depression of the medial condylopatellar sulcus (FIGURE 1), which was concerning for a possible impacted osteochondral fracture. After discussing the radiographic findings with a radiologist, the therapist ordered magnetic resonance imaging, which revealed a focal indentation of the anterior portion of the medial femoral condyle with adjacent bone marrow edema that was consistent with an impaction fracture of the medial femoral condyle (FIGURE 2). There was also a partial tear of the left anterior cruciate ligament noted on magnetic resonance imaging, although subsequent assessment of the anterior cruciate ligament with the anterior drawer and Lachman tests was negative for laxity.

The patient was referred to an orthopaedic surgeon, who recommended conservative management. The patient’s treatment plan included 6 weeks of weight bearing as tolerated for the left lower extremity while wearing a knee brace that prevented the final 20° of knee extension, and a program of range-of-motion and progressive resistive exercises, with eventual emphasis on sport-specific activities. At 3 months following his injury, the patient was able to return to unlimited activity with no complaints of knee pain or instability.

Reference

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