

SPORTS MEDICINE & ORTHOPEDICS

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FIGURE 1



FIGURE 2

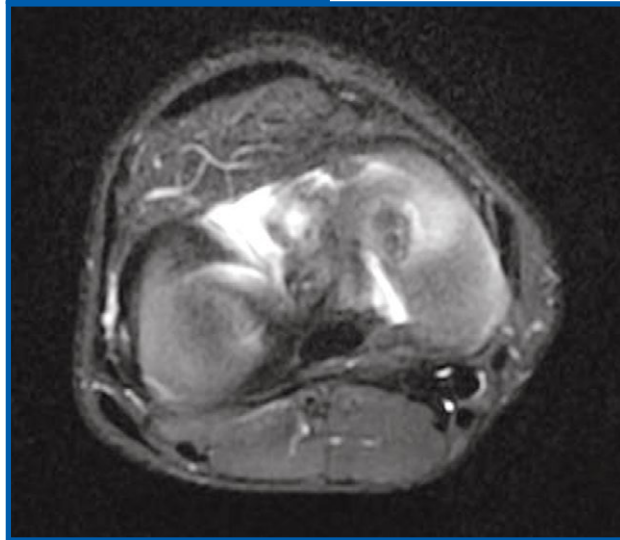


FIGURE 3



A 13-year-old boy presents with a 10-month history of a painful right knee. The pain occurs especially when he is playing sports. He denies any history of trauma or injury to the knee. Findings on examination of the right knee are noncontributory, except for mild pain during the McMurray test. Radiographs are completed and are negative for any acute process. MRI is also performed (Figures 1, 2, and 3).

How would you interpret these images?

Dr. Patterson, editor of "Challenges in Sports Medicine and Orthopedics," is the director of sports medicine at the National Training Center Sports Medicine Institute. He is board certified in family medicine and spinal cord injury medicine and is fellowship trained in sports medicine. **Dr. Ray** is the CEO of the National Training Center Sports Medicine Institute and is a board-certified orthopedic surgeon specializing in sports medicine. The National Training Center Sports Medicine Institute in Clermont, Florida, specializes in the nonoperative and operative orthopedic treatment of patients of all ages, including elite performance athletes.

CONTINUED

FIGURE 1



FIGURE 2

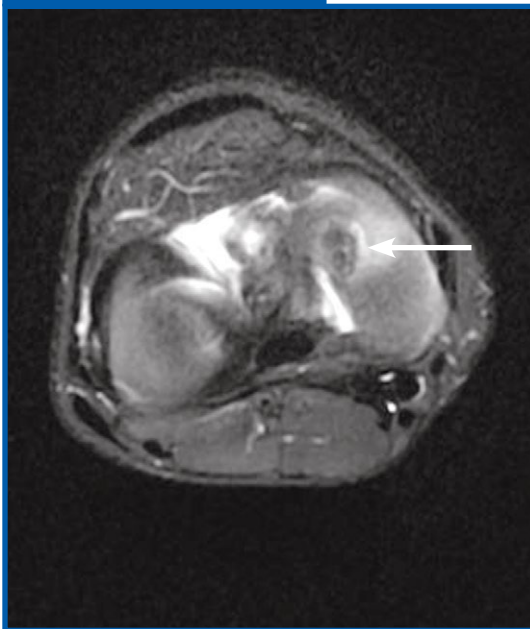


FIGURE 3



The MR images reveal osteochondritis dissecans of the lateral aspect of the medial femoral condyle without displacement of the fragment. Osteochondritis dissecans is usually the result of occult trauma causing shearing forces through the articular cartilage, in combination with bone susceptibility secondary to immature ossification of the bone. Therefore, most cases of osteochondritis dissecans occur during early adolescence. Young children diagnosed with this condition are treated conservatively with observation. Adolescents may be managed using a long leg cast for 6 weeks, unless displacement of the fragment occurs. Arthroscopy is indicated when conservative management fails or a loose fragment is identified. Patients may return to sports after pain resolves. With arthroscopy and fixation of the lesion, a 3- to 6-month delay is usually required.¹

REFERENCE

1. Turman KA, Hart JA, Miller MD. Cartilage problems in sports. In: Madden CC, Putukian M, Young CC, et al, eds. *Netter's Sports Medicine*. Philadelphia, PA: Saunders Elsevier; 2010:438-444.