Spontaneous Osteonecrosis of the Knee

Spontaneous osteonecrosis of the knee is a common cause of knee pain, principally seen in women over 60 years of age. This condition is distinguished from secondary conditions with known causes, such as corticosteroid–induced osteonecrosis. Although originally described and most common in the medial femoral condyle, it can also occur in the tibial plateaus and on the lateral side of the femur. The radionuclide bone scan will show focally increased uptake before the radiographs are abnormal. Magnetic resonance imaging can also be diagnostic, but the findings may be normal early in the course of the disease. The etiology remains unknown, but it is speculated that primary vascular ischemia or microfractures in osteoporotic bone are causative. Many patients have a benign course followed by resolution of symptoms. Therefore, conservative management is indicated initially. If progressive collapse accompanied by severe symptoms occurs, high tibial osteotomy, unicompartmental replacement, and total knee replacement are therapeutic alternatives. Recognition of this entity is important to avoid needless surgical intervention.

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• ML Ecker and PA Lotke