

the affected joint may be prominent, but morning stiffness is usually brief (<30 min).

In knees, buckling may occur, in part, from weakness of muscles crossing the joint. Mechanical symptoms, such as buckling, catching, or locking, could also signify internal derangement, like an anterior cruciate ligament or meniscal tear; however, these symptoms, which are common in persons with knee OA, need to be further evaluated only if they develop after an acute knee injury. In the knee, pain with activities requiring knee flexion, such as stair climbing and arising from a chair, often emanates from the patellofemoral compartment of the knee, which does not actively articulate until the knee is bent $\sim 35^\circ$.

OA is the most common cause of chronic knee pain in persons aged >45, but the differential diagnosis is long. Inflammatory arthritis is likely if there is prolonged morning stiffness and many other joints are affected. Bursitis occurs commonly around knees and hips. A physical examination should focus on whether tenderness is over the joint line (at the junction of the two bones around which the joint is articulating) or outside of it. Anserine bursitis, medial and distal to the knee, is an extremely common cause of chronic knee pain that may respond to a glucocorticoid injection. Prominent nocturnal pain in the absence of end-stage OA merits a distinct workup. For hip pain, OA can be detected by loss of internal rotation on passive movement, and pain isolated to an area lateral to the hip joint usually reflects the presence of trochanteric bursitis.

No blood tests are routinely indicated for workup of patients with OA unless symptoms and signs suggest inflammatory arthritis. Examination of the synovial fluid is often more helpful diagnostically than an x-ray. If the synovial fluid white count is $>1000/\mu\text{L}$, inflammatory arthritis or gout or pseudogout is likely, the latter two being also identified by the presence of crystals.

Neither x-rays nor magnetic resonance imaging are indicated in the workup of OA. They should be ordered only when joint pain and physical findings are not typical of OA or if pain persists after inauguration of treatment effective for OA. In OA, imaging findings (**Fig. 371-6**) correlate poorly with the presence and severity of pain. Further, in both knees and hips, radiographs may be normal in early