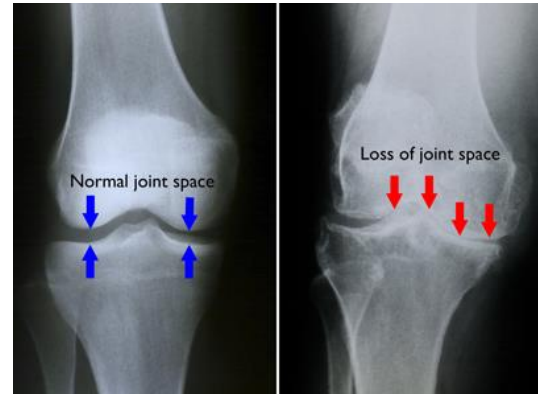


Knee osteoarthritis

- Osteoarthritis is where the articular cartilage in your bones begin to breakdown. Articular cartilage covers the ends of bones (tibia and femur) and the undersurface of the patella (kneecap). Articular cartilage is a smooth, slippery surface, which allows the bones of the knee joint to slide over each other without rubbing. The articular cartilage in the knee is designed to limit pressure and friction as you move the knee.



Knee symptoms of osteoarthritis

- A knee joint affected by osteoarthritis can be painful. Generally, the pain develops gradually over time, although a sudden onset of pain with or without an injury can occur. Symptoms may include knee joint stiffness and swelling, which can limit knee motion. High load activity on the knee may cause an acute flare up of symptoms (i.e. running, jumping, various sports activities). Loose fragments of cartilage may break away causing irritation and mechanical locking of the knee.

Diagnostic testing

- X-rays can help the provider in diagnosing various forms of arthritis. X-ray findings when diagnosing knee osteoarthritis include: joint space narrowing, subchondral sclerosis (hardening of bone), subchondral cyst formation, and osteophytes (formation of bone spurs).
- MRI - a MRI may be indicated to further evaluate the degree of cartilage loss if plain X-rays do not show significant osteoarthritis.

Treatment options

- Treatment options for knee osteoarthritis are determined on a case by case basis. Various factors are considered before recommending a particular treatment. These treatments include: Non-steroidal anti-inflammatory drugs (NSAIDs), activity modifications, formal physical therapy, bracing (an unloader brace with patients with unicompartmental osteoarthritis), cortisone injections and possibly lubricant injections.
- Definitive treatment for moderate to severe osteoarthritis is Knee Arthroplasty (Knee replacement) - if conservative treatment fails.