

What Is Knee Osteoarthritis?

Knee osteoarthritis is a common cause of knee pain and disability among adults.

Knee osteoarthritis is a chronic disorder that consists of damage to the cartilage, bone, and surrounding tissues of the knee. It affects approximately 23% of people older than 40 years worldwide and about 45% of people by age 85 years.¹

Who Is Most Likely to Develop Knee Osteoarthritis?

People who are most likely to develop knee osteoarthritis include women and individuals with obesity, a previous knee injury, misaligned knees, or weak thigh muscles and those who squat and kneel frequently for work, such as farm workers.

What Are the Symptoms of Knee Osteoarthritis?

The most common symptoms of knee osteoarthritis are knee pain with activity and/or functional limitations such as difficulty getting up from a chair, climbing stairs, and walking. Additional symptoms may include morning knee stiffness lasting less than 30 minutes, knee swelling, and a sensation of the knee buckling or giving way. Symptoms of knee osteoarthritis typically begin gradually and may include brief, intermittent flares of knee pain.

How Is Knee Osteoarthritis Diagnosed?

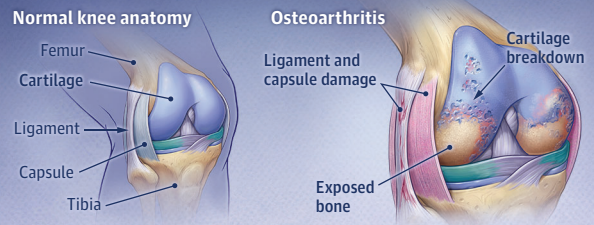
Knee osteoarthritis is typically diagnosed based on a patient's medical history and physical examination. Common signs include a cracking or popping sound with knee movement, knee joint enlargement, and a limited range of motion of the knee. X-rays are not needed to make the diagnosis in patients aged 45 years or older who have activity-related knee pain without morning stiffness or with morning stiffness lasting less than 30 minutes.

X-rays and laboratory tests may be used for patients with atypical symptoms such as prolonged joint stiffness or knee pain at rest, a change in symptoms such as knee swelling and redness with nighttime pain or an unexpectedly rapid progression of symptoms, or if another knee condition is suspected. X-rays can help assess the severity of knee osteoarthritis, prognosis, and likelihood of improvement with knee replacement surgery.

What Treatments Are Used for Knee Osteoarthritis?

Because there are currently no therapies that reverse or prevent progression of knee osteoarthritis, treatment focuses on relieving symptoms. First-line treatments are exercise therapy, weight loss for those with overweight or obesity, patient education, and use of a knee brace or cane, if indicated. Nonsteroidal anti-inflammatory drugs (NSAIDs) that are applied to the skin or taken orally may help reduce knee pain. However, oral NSAIDs should be used for a short duration at the lowest

Knee osteoarthritis is a chronic disorder involving damage to the cartilage, bone, and surrounding tissues of the knee. Risk factors include age older than 40 years, female sex, those with overweight or obesity, prior knee injury, misaligned knees, weak thigh muscles, and work that involves frequent squatting or kneeling.



Symptoms include knee pain with activity such as



First-line treatments include exercise therapy, weight loss for those with overweight or obesity, patient education, and use of a knee brace or cane. Topical or oral nonsteroidal anti-inflammatory drugs (NSAIDs) may help reduce pain. Corticosteroid injections into the knee joint may provide temporary relief.

effective dose. For patients with persistent pain due to knee osteoarthritis, injection of corticosteroids into the knee joint may provide temporary pain relief. Commonly used medications such as acetaminophen, duloxetine, and tramadol are only conditionally recommended for knee osteoarthritis. Other treatments, including supplements such as glucosamine and chondroitin, opioids, acupuncture, and arthroscopy, have not been proven effective for knee osteoarthritis.

Total knee replacement surgery may be considered for patients with advanced knee osteoarthritis on x-ray and persistent symptoms despite 6 months of behavioral and medical treatments. Although many patients have substantially decreased pain in the first 12 months after total knee replacement, 10% to 34% report long-term pain between 3 months and 5 years afterward.

FOR MORE INFORMATION

[American Academy of Orthopaedic Surgeons](https://www.aaos.org/)

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