

KNEE OSTEOARTHRITIS

WHAT IS ARTHRITIS?

Arthritis is inflammation of one or more of your joints. **Pain, swelling, and stiffness** are the primary symptoms of arthritis.

OSTEOARTHRITIS

Most common form of arthritis. It is degenerative, wear and tear arthritis. The cartilage of the knee gradually wears away and the space between the bones decreases, which creates bone on bone changes and bone spurs.

POSTTRAUMATIC

A form of arthritis that develops after an injury of the knee. A fracture, meniscal tears, or ligament injuries can cause instability and additional wear on the knee joint which can result in arthritis.

WHO GETS IT?

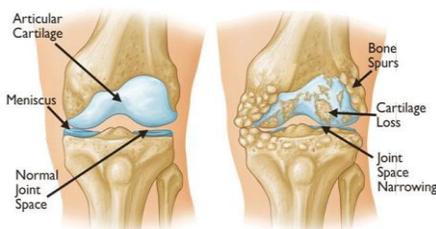
Osteoarthritis is seen mostly in individuals > 50 years old but can be seen in younger populations as well.

COMMON SYMPTOMS

The knee joint is typically painful and inflamed. The pain gradually increases over time but can also have a sudden onset. Stiffness worse in the morning, pain, weakness or buckling, and swelling are all seen in arthritis.

IMAGING

X-rays can demonstrate a narrowing of joint space, changes in the bony alignment, and formation of bone spurs.



The knee is made up of three bones: the femur (thigh bone), the tibia (shin bone) and patella (knee cap). The ends of the bone are covered in **cartilage**, which cushions the bone as you bend and extend the knee. The **meniscus** act as a shock absorber between the thigh and shin bone. The knee joint is surrounded by a lining called the synovium that contains a fluid that lubricates the joint.

LIFESTYLE MODIFICATION

Wearing appropriate shoes for activities. Minimizing activity that causes stress to the knees (ie. high impact running or jumping). Engaging in low impact activity (swimming or cycling). Incorporating stretching, strengthening, and flexibility exercises for the hip and thigh muscles into a training routine. Maintain a healthy body weight to avoid overstressing knees

HOME EXERCISE PROGRAM VS. PHYSICAL THERAPY

Specific exercises will help improve range of motion, strength, and endurance. Focus on strengthening and stretching your quadriceps, hamstrings, glutes, and core. Working with a licensed professional can improve strength and flexibility under direct supervision.

A strength and conditioning program should be continued 2-3x a week for at least 4-6 weeks unless otherwise specified.

NON-SURGICAL TREATMENT

RICE

- Rest
- Ice vs heat application
- Compression sleeve or unloader brace
- Elevation

ACTIVITY MODIFICATION

- Modify activities as needed
- Incorporate low impact activity such as biking, swimming, elliptical

OVER THE COUNTER MEDICATIONS

- Tylenol 1000mg three times daily
- Advil 600mg three times daily* OR
- Aleve 440mg twice daily *

PRESCRIPTION MEDICATIONS

- Meloxicam 15mg once daily*
- Diclofenac Sodium 75mg twice daily*
- Medrol Dose Pak taken as directed

*NSAIDS should be taken for 10-14 days with food. May cause gastric upset and cannot be taken with blood thinner medications

INJECTIONS

- Steroid Injections
- Hyaluronic Acid Injections
- Platelet Rich Plasma Injections (PRP)

SURGICAL TREATMENT

Surgical treatment is the only definitive management option for osteoarthritis. A total or partial knee replacement (arthroplasty) can be done to remove the damage bone and cartilage and use metal and plastic surfaces to restore the function of the knee.

Arthritis of the knee - OrthoInfo - AAOS

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