Osteoarthritis

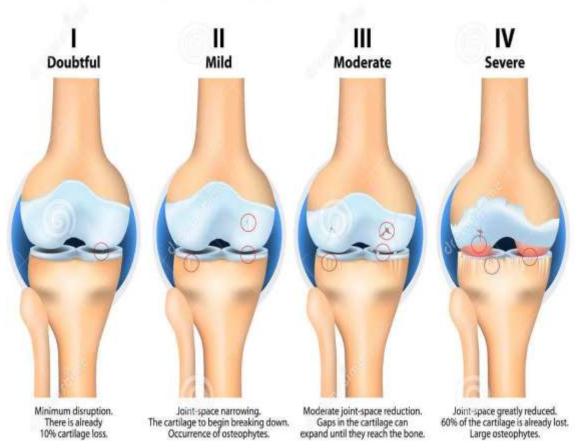
Definition

Osteoarthritis is the most common form of arthritis, affecting millions of people worldwide. It occurs when the protective cartilage on the ends of your bones wears down over time.

Although osteoarthritis can damage any joint in your body, the disorder most commonly affects joints in your hands, knees, hips and spine.

Osteoarthritis often gradually worsens, and no cure exists. But staying active, maintaining a healthy weight and other treatments may slow progression of the disease and help improve pain and joint function.

STAGE OF KNEE OSTEOARTHRITIS



Symptoms

Osteoarthritis symptoms often develop slowly and worsen over time. Signs and symptoms of osteoarthritis include:

- Pain. Your joint may hurt during or after movement.
- **Tenderness.** Your joint may feel tender when you apply light pressure to it.
- **Stiffness.** Joint stiffness may be most noticeable when you wake up in the morning or after a period of inactivity.
- Loss of flexibility. You may not be able to move your joint through its full range of motion.
- **Grating sensation.** You may hear or feel a grating sensation when you use the joint.
- **Bone spurs.** These extra bits of bone, which feel like hard lumps, may form around the affected joint.

Causes

Osteoarthritis occurs when the cartilage that cushions the ends of bones in your joints gradually deteriorates. Cartilage is a firm, slippery tissue that permits nearly frictionless joint motion. In osteoarthritis, the slick surface of the cartilage becomes rough. Eventually, if the cartilage wears down completely, you may be left with bone rubbing on bone.

Treatments and drugs

There's no known cure for osteoarthritis, but treatments can help reduce pain and maintain joint movement.

Medications

Osteoarthritis symptoms may be helped by certain medications, including:

- **Acetaminophen.** Acetaminophen (Tylenol, others) can relieve pain, but it doesn't reduce inflammation. It has been shown to be effective for people with osteoarthritis who have mild to moderate pain. Taking more than the recommended dosage of acetaminophen can cause liver damage.
- Nonsteroidal anti-inflammatory drugs (NSAIDs). NSAIDs may reduce inflammation and relieve pain. Over-the-counter NSAIDs include ibuprofen (Advil, Motrin IB, others) and naproxen (Aleve, others). Stronger NSAIDs are available by prescription. NSAIDs can cause stomach upset, ringing in your ears, cardiovascular problems, bleeding problems, and liver and kidney damage. They should not be used by people over 65 years of age and those who have stomach bleeding. Topical NSAIDS have fewer side effects and may relieve pain just as well.

Therapy

Exercising and achieving a healthy weight are the best and most important ways to treat osteoarthritis. Your doctor also may suggest:

- **Physical therapy.** A physical therapist can work with you to create an individualized exercise program that will strengthen the muscles around your joint, increase your range of motion and reduce pain.
- Occupational therapy. An occupational therapist can help you discover ways to do
 everyday tasks or do your job without putting extra stress on your already painful
 joint. For instance, a toothbrush with a large grip could make brushing your teeth
 easier if you have finger osteoarthritis. A bench in your shower could help relieve the
 pain of standing if you have knee osteoarthritis.
- Braces or shoe inserts. Your doctor may recommend shoe inserts or other devices
 that can help reduce pain when you stand or walk. These devices can immobilize or
 support your joint to help take pressure off it.
- A chronic pain class. The Arthritis Foundation and some medical centers have classes for people with osteoarthritis and chronic pain. Ask your doctor about classes in your area or check with the Arthritis Foundation. These classes teach skills that help you manage your osteoarthritis pain. And you'll meet other people

with osteoarthritis and learn their tips and tricks for reducing and coping with joint pain.

Surgical and other procedures

If conservative treatments don't help, you may want to consider procedures such as:

- Cortisone shots. Injections of corticosteroid medications may relieve pain in your
 joint. During this procedure your doctor numbs the area around your joint, then
 places a needle into the space within your joint and injects medication. The number
 of cortisone shots you can receive each year is limited, because the medication can
 worsen joint damage over time.
- **Lubrication injections.** Injections of hyaluronic acid may offer pain relief by providing some cushioning in your knee. Hyaluronic acid is similar to a component normally found in your joint fluid.
- Realigning bones. During a surgical procedure called an osteotomy, the surgeon
 cuts across the bone either above or below the knee to realign the leg. Osteotomy
 can reduce knee pain by shifting your body weight away from the worn-out part of
 your knee.
- Joint replacement. In joint replacement surgery (arthroplasty), your surgeon removes your damaged joint surfaces and replaces them with plastic and metal parts. The hip and knee joints are those most commonly replaced. Surgical risks include infections and blood clots. Artificial joints can wear out or come loose and may need to eventually be replaced. Repeat joint replacements are more challenging and less successful than the original surgery.