

OSTEOARTHRITIS OF THE KNEE

What is osteoarthritis?

Osteoarthritis, also known as degenerative (wear and tear) arthritis, is the most common type of arthritis. It is frequently a slowly progressive joint disorder. Osteoarthritis is the loss or breakdown of cartilage which is the protective covering on the ends of each bone where two or more bones come into contact to form a joint. One analogy of osteoarthritis is to compare it to parts of an orange. The orange peel is like healthy cartilage that protects the fruit and the underlying fruit is your bone. As the protective orange peel (cartilage) thins and is lost, it exposes the underlying fruit (bone). Healthy intact cartilage allows bones to glide over one another pain free since it does not have pain receptors. It also absorbs energy from the shock of physical movement. In osteoarthritis, the surface layer of cartilage breaks down exposing the underlying bone which has pain receptors. Cartilage loss allows bones in the joint to rub together, causing pain, stiffness, swelling and loss of motion. Over time the joint may lose its normal alignment and change in size. Exposed bones rubbing on each other can cause extra bone formation called osteophytes or bone spurs. Bone spurs are like your skin developing calluses when chronic pressure has been applied, and the tissue thickens and hardens.



How did I get osteoarthritis?

Osteoarthritis develops over time and likely you didn't do anything to cause it. With osteoarthritis being a breakdown of cartilage, it is more common in people over 50, and in people who are overweight. Osteoarthritis also has a genetic component and can be hereditary. People who have had previous knee problems, knee injuries or knee surgery are more likely to develop knee osteoarthritis as they age.

How is it diagnosed?

Dr. Comfort will examine your knee and order x-rays during your office visit if not previously performed. X-rays show the amount of space you have between the bones which correlates to the amount of cartilage you have as well as any bone spurs or alignment changes.



Figure 1



Figure 2

How is osteoarthritis treated?

There is no proven treatment yet that can reverse or restore the loss of cartilage in osteoarthritis. The goal of osteoarthritis treatment is to manage your knee symptoms by reducing pain and improving function.

Dr. Comfort will discuss initial treatments which may include starting or modifying an exercise program, weight loss, or starting an over the counter pain medication (Tylenol, Advil, Aleve, Motrin). Dr. Comfort may refer you to work with a physical therapist to strengthen the muscles around your knee which can help with your daily activities, (walking, steps, getting up from chairs), improve knee function and pain. Joint supplements containing glucosamine chondroitin also may help but discuss all your medications with Dr. Comfort to make sure there are no side effects or possible drug interactions. A prescription medication for osteoarthritis may also be recommended. If these initial treatments are unsuccessful at controlling your symptoms and improving your function, Dr. Comfort may suggest a cortisone injection (steroid injection) to reduce the swelling and pain in the joint. If the cortisone injection does not provide you the expected relief or duration of relief (minimum three to four months) Dr. Comfort may then recommend a joint injection series (3 injections) to help lubricate the joint with a chemical called hyaluronic acid (Euflexxa) which for certain patients can decrease knee pain, swelling and improve quality of life. Euflexxa is also sometimes called the "chicken shot, rooster shot, or lubrication shot".

