

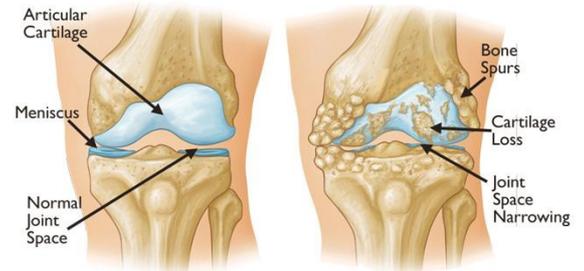
Osteoarthritis of the Knee

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Introduction:

Osteoarthritis is a common problem for many people after middle age. Osteoarthritis is the type of arthritis involving the cartilage of a joint. The cartilage of a joint is a tough, gristle-like material that is found on the ends of the bones. It forms the surface of the joint on either side. Cartilage is durable and somewhat elastic. Over time, the cartilage may become worn. Eventually the cartilage may wear away entirely. This cartilage deterioration is what defines osteoarthritis. Unlike some other types of arthritis, osteoarthritis does not affect the whole body, however, the changes it can cause may limit due to the pain and loss of movement. Osteoarthritis can develop as a natural process of aging or it may occur as a result of a traumatic injury.

The normal knee is a complex joint consisting of bones and soft tissue structures that are designed to move and put up with forces of everyday activity. The forces of the knee are centralized in 3 areas or compartments. Each compartment takes in the stress of activity through the cartilage. Osteoarthritis may often develop in 1 of the 3 compartments of the knee, while the two remain relatively healthy. In the short term this can be managed with the use of anti-inflammatory drugs, pain relievers and physical therapy, which can delay the need for surgery, but eventually it may require further treatment.



Symptoms and Signs:

The predominant symptoms of osteoarthritis of the knee are pain, swelling, stiffness and a decreased activity level. The pain generally worsens with activities and improves with rest. Commonly, wasting of the thigh muscle occurs. This in turn may increase pain and may also cause symptoms of giving way. Symptoms such as locking and catching may also occur.

Treatment Options:

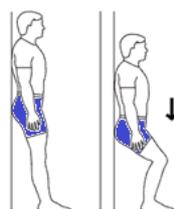
Flare ups of osteoarthritis are secondary to the inflammatory process. Initially, all patients should be treated conservatively. The reason for this is that osteoarthritic knees follow a course of sudden pain that settles over several weeks, followed by relief. Ultimately the intensity becomes more frequent as the osteoarthritis progresses, and when this happens surgical treatment should be considered. Conservative treatment consists of a four-week course of pain relievers or anti-inflammatory medications. We prefer the regular dosage of pain relief, such as panadol, because they are safe and effective. Exercise or physiotherapy should be used to strengthen the thigh muscle, as this improves the knee joint and therefore reduces the symptoms. Weight reduction is important. It is important to avoid high impact activities such as running and jumping. To maintain fitness, cycling and swimming is encouraged. If conservative measures fail, consideration can be given to surgical treatment.

Recommended Exercises for OA knee:

Exercise bike 20-60 minutes

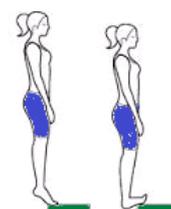


Wall Squats.

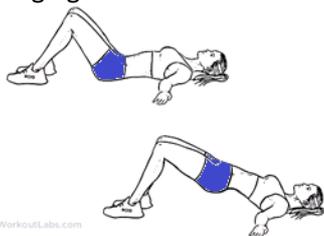


Avoid deep squats beyond 90 degrees of knee flexion

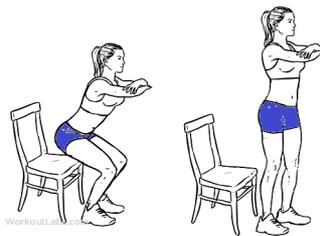
Calf raises on edge of step



Bridging



Sit to Stands



Walking 30-60 minutes

