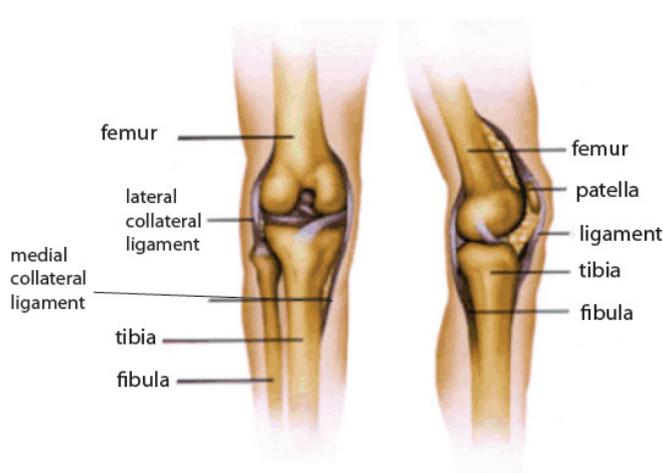


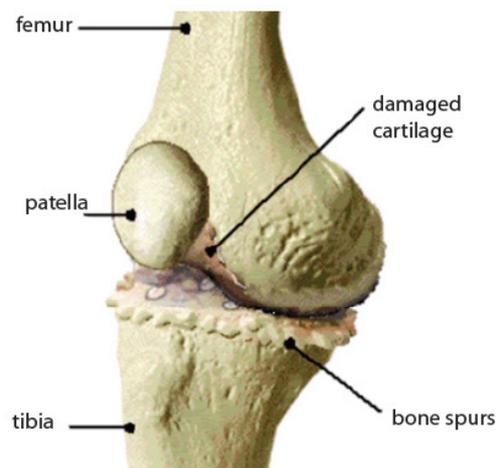
Knee Osteoarthritis

Osteoarthritis (OA) is a painful inflammatory condition affecting the joints of the body. It causes changes to the cartilage on the surface of the joints which normally acts as a shock absorber for the joint and its smooth, slippery surface which allows freedom of movement. When someone has OA their cartilage becomes thinner and its surface roughened. The bone underneath becomes thicker and can grow out at the side of the joints. Extra fluid may form making the joint swell slightly and the capsule and ligaments may thicken and get stretched.

In most cases the changes are fairly mild, although occasionally they may be more severe. In the worst cases this may alter the shape of the joint.



Normal Knee



Arthritic Knee

These may include:

- dull, aching joint pain
- pain worsened with activity, relieved with rest
- stiffness of the knee joint, often for a short time in the morning
- loss of range of motion in the knee joint
- enlargement/swelling of the affected joints
- joint crepitus (crackling sound on movement)
- altered appearance of the limb
- muscle weakness or giving way

The symptoms are often variable with episodic spells of a few weeks or months. Damp weather may worsen joint pain in some sufferers.

The causes

Age:

OA is common among older people, although it may sometimes start earlier.

Joint wear:

Wear and tear is the most common cause of OA, often exacerbated by being overweight; however, a major injury or some joint surgeries may predispose you to increased wear resulting in OA. **Heredity:** Some forms of OA run in families, but this plays only a small part in most of the varieties

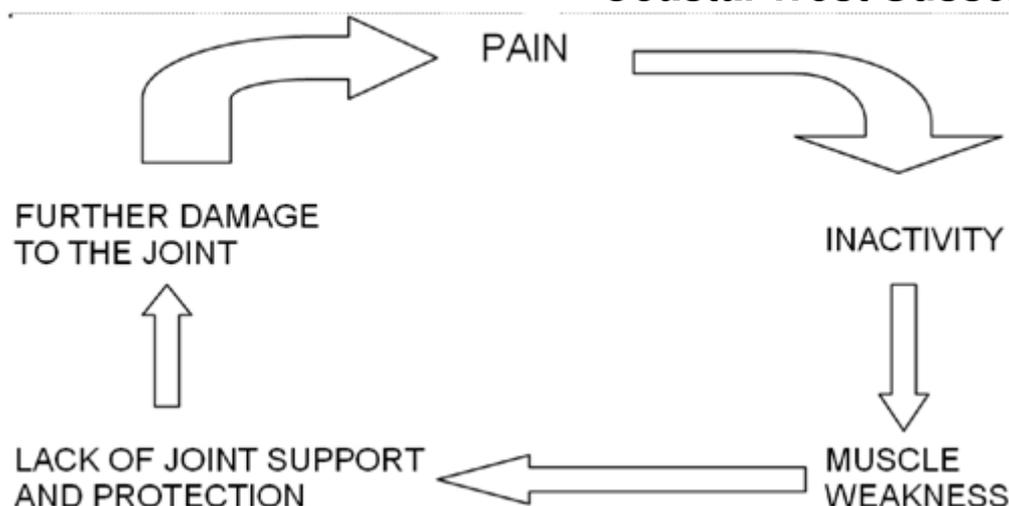
Deconditioning:

Decreased strength and control of the muscles around a joint may leave it less supported and may make it prone to wear and tear.

Management of OA

Drug treatment - several drugs can help you deal with the symptoms of OA. These include painkillers (such as paracetamol) and anti-inflammatories (such as ibuprofen). You should seek guidance from your pharmacist or GP when considering using anti-inflammatories, especially if there is a risk of stomach problems. There is much debate on the use of dietary supplements (e.g. glucosamine and chondroitin tablets, fish oils etc). Although some people report beneficial effects from these treatments, they have yet to be satisfactorily proven in clinical trials. Unfortunately, no medicine available at this time has been shown to provide a cure for osteoarthritis.

Exercise - helps strengthen and recondition the muscles around the joint and may help to protect it. A routine of simple strengthening and stretching exercises can be of great help in reducing the pain associated with osteoarthritis, improving mobility and maintaining a higher activity level. The exercise is of great importance in breaking the vicious circle caused by inactivity which is a result of pain, and to prevent the further damage to the joint.



Physiotherapy - can be beneficial by providing more specific exercises, advice and local treatment when stiffness, weakness and pain persist in the knee joint.

Exercises in water (Hydrotherapy) - may be prescribed to relieve pain and improve movement and muscle strength. Some people find swimming a particularly good way of exercising and keeping fit, as it is a non-impact activity and causes little pain.

Ice or heat - either of these may help the pain. Ice if the knee is hot and swollen and heat if it's painful and stiff. Be sure you don't use either if you have poor circulation or if there is any other medical reason for avoiding one or the other. Make sure that you read the instructions well before using them or ask for advice from your physiotherapist in order to prevent skin injuries or burns.

Surgery and joint replacement - may be an option in cases where severe pain has developed in spite of the above treatment.

Useful hints:

- You can reduce the stress on painful joints by maintaining a healthy body weight.
- Avoid activities which cause prolonged, severe pain afterwards. However, it is important to stay fit and active and to keep the joint moving fully.
- Joints do not wear out with overuse. In general it is much better to use them than not to. However, you will need to strike a balance between too much activity and too much rest.
- For most people with OA the best advice is little and often. For example do housework or gardening in short spells interrupted by short rests. Avoid sitting in one place for too long; get up and stretch the joints from time to time.

And finally:

Please find attached a number of suggested exercises. They should be worked through at least once a day. Although there may be some discomfort during the exercises, they should not cause an increase in overall pain.

Personal Exercise Program



Provided by: Physiotherapy Dept.

Lying on your back, or sitting up, with legs straight.

Bend your ankles, squeeze your thigh muscle, and push your knee down

Firmly against the bed. Hold 5 secs. - relax.

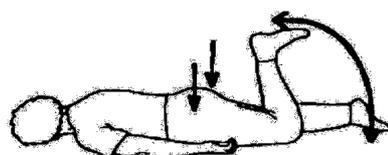
REPEAT 5 TIMES



Lying on your back, or sitting up, with one leg straight and the other leg bent.

Exercise your straight leg by pulling the toes up, straightening the knee and lifting the leg 20cm off the bed. Hold approx 5 secs - slowly relax.

REPEAT 5 TIMES

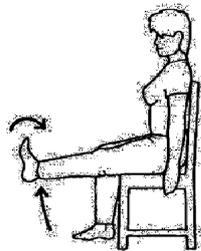


Lying face down with your hips straight and knees together.

Bend your knee as far as possible keeping the hip straight. Hold for 5 seconds.

REPEAT 5 TIMES

Please note - this exercise can be more advanced by performing it in standing, whilst holding on to a support.



Sit on a chair.

Pull your toes up, tighten your thigh muscle and straighten your knee, Hold approx. 5 secs. and slowly relax your leg.

REPEAT 5 TIMES
