



Sit on a chair with your feet on the floor. Bend your knee as much as possible.



Stand with the leg to be stretched, straight out behind you and the other leg bent in front of you.

Lean your body forwards and down, stretching the calf of the straight leg. Hold approx. 30 secs. - relax.



Sit on a chair. Pull your toes up, tighten your thigh muscle and straighten your knee. Hold for 20 secs and slowly relax your leg. Repeat 5 times



Find a sturdy chair. Cross your arms across your chest. Stand up and sit down again. Repeat 10 times



Find a Step. Step up with one foot, bring the other foot up and step down again. Repeat 10 times



Stand with your back against a wall, and place a small ball between your knees. Slide down the wall a little way, keeping the ball between your knees. Push back up to the start.

REMEMBER:

Exercises should be performed slowly and controlled. Pace yourself. A little pain is OK when exercising but pain should not linger for more than 30 minutes. Decrease repetitions or stop the exercises if pain lingers.

OSTEOARTHRITIS OF THE KNEE

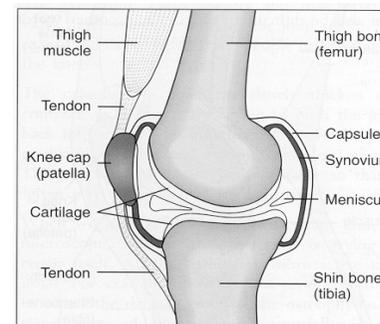
What is Osteoarthritis:

Osteoarthritis is a disease that affects the joints of the body. 'Osteo' means bone, and 'arthritis' means joint damage and swelling. Joints affected by osteoarthritis can be painful and difficult to move. The surface of the joint becomes damaged and the surrounding bone grows thicker resulting in pain and inflammation. Osteoarthritis of the knee is a very common form of osteoarthritis. Other words used to describe this condition include 'degenerative joint disease', and 'wear and tear'.

How does it develop:

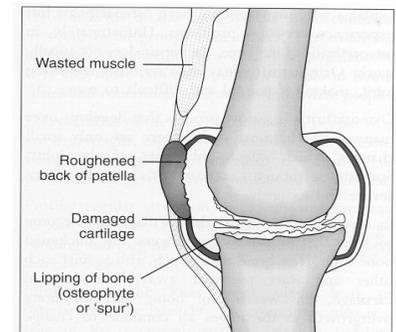
To understand how arthritis develops you need to know how a normal joint works. The knee joint is where the thigh bone and the shin bone meet. The end of each bone is covered by a smooth slippery surface called cartilage. The cartilage allows the joint to move freely without friction. When a joint develops arthritis, the cartilage gradually roughens and becomes thin. The surrounding bone reacts by growing thicker, and bone at the edges will grow outwards and may form bony spurs (osteophytes). When the joint surfaces roughen, pain and swelling are produced.

Normal Knee Anatomy



A normal knee joint.

Osteoarthritis of the Knee



A knee joint with osteoarthritis.

Diagnosis:

Your doctor or physiotherapist can usually make a diagnosis by using clinical tests and looking for grating, swelling, and muscle wasting around the knee. An x-ray can help confirm the diagnosis but is often not necessary. Osteoarthritis is twice as common in women as men and is more common in people who are overweight .

Symptoms:

People with osteoarthritis of the knee joint usually complain that the knee is painful or aching. Your knee may also feel stiff, especially first thing in the morning. You will probably find that your pain will vary, and changes in the weather may make a difference. Other symptoms you may experience are swelling, grating, muscle weakness and giving way.

Flare- ups:

Flare-ups are the periodic increases in your usual amount of pain and/or swelling. A flare up may last from a couple of hours to a couple of days. They are unfortunately, part and parcel of having osteoarthritis, but how you manage them can have a major influence on how you manage your symptoms in general.

Rest or Exercise?

Joints do not wear out with normal use. In general, it is much better to use them than not to! However most people with osteoarthritis find that while too much exercise worsens their pain, too much rest stiffens them up. Find a balance. The best advice for most people is little and often.

Treatment:

There are no cures for osteoarthritis. But there are many treatments that aim to reduce discomfort and pain, reduce stiffness, and help minimise any further damage to the joint.

- **Medication:**

At the moment there are no drugs which affect how osteoarthritis develops. But some medication can help with the symptoms such as anti-inflammatory cream, and pain relievers. Use of stronger anti-inflammatory tablets would need to be discussed with your doctor.

- **Self-treatment:**

There are a number of things you can do yourself to reduce symptoms.

- Ensure that you do not keep your leg bent in the same position for long periods.
- Wear cushioned trainers, as these act as a shock absorber.
- To take the weight off a painful joint, use a stick on the opposite side, but keep moving!
- Keep your knee warm. It can help to relieve pain and stiffness
- Maintain an ideal body weight
- Keep fit. This benefits your whole body.
- Use a hand rail for support when climbing stairs. Go upstairs one at a time with your good leg first. Come downstairs with your bad leg first, followed by the good leg.

- **Surgery:**

Most people with osteoarthritis of the knee will never need surgery, but in severe cases joint replacement operations can be performed.

- **Exercises:**

As mentioned previously, osteoarthritis of the knee can lead to stiffness and weakness of the thigh muscle. The weaker the muscles around the joint, the less support the joint has, and the more painful it gets. It is therefore important to perform some specific exercises to maintain strength and mobility, and thereby reduce pain.