



# Osteoarthritis of the Knee

# PATIENT INFORMATION LEAFLET

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Osteoarthritis (OA) of the knee is very common. It is known by various names - 'wear and tear', arthritis and degeneration. Not everyone who has OA of the knee joint will require surgery. The majority can live an active life by employing simple self care methods.

In the process of OA the joint surfaces are affected. The cartilage that covers the ends of the bones (hyaline cartilage) becomes roughened and the bone underneath thickens. In <u>severe</u> OA the cartilage becomes so thin that it no longer covers the thickened bone ends. The bone ends then touch, rubbing against one another and so start to wear away. The loss of cartilage, the wearing of the bone and the boney overgrowth at the edges all combine to change the shape of the joint, forcing the joint out of its normal position to cause deformity.



Fig 1 ~ Normal Knee Joint

Fig 2 ~ Late Stage Osteoarthritic Knee Joint

#### CAUSES

The exact cause of OA is unknown. It is probably a combination of factors which can include age, previous injury or disease and can sometimes run in families. A certain amount of wear and tear is normal as we age. just like getting grey hair. In many ways OA is an exaggeration of this.

## SYMPTOMS

- 1 Pain
- 2 Stiffness worse in the morning after rest
- 3 Loss of movement
- 4 Weakness of the thigh muscle (reduced muscle bulk)
- 5 Creaking or grating on movement
- 6 Swelling
- 7 Reduced function i.e. climbing stairs, walking for long distances, kneeling You may experience all or some of these symptoms. Your symptoms may vary for no apparent reason, with bad spells of a few weeks or months broken by better periods. Not everyone with OA of the knee will require a course of Physiotherapy.

### SELF CARE

It is not possible to predict the behaviour of your symptoms as no two people will be affected in the same way. There are a number of measures which can help you to help yourself.

Two aspects of your lifestyle and routine may need to be changed. These can prove more important in helping you in the long term than any medication.

### 1 Reduce stress on the joint:

- ▲ Keep to your ideal weight
- ▲ Use a walking stick if provided
- ▲ Try not to overstress your joint by doing too much all in one day e.g. spread gardening, household chores out over the week
- ▲ Avoid high heels
- ▲ Avoid prolonged positions wherever possible to help prevent stiffness

- 2 Exercise:
- ▲ Exercise will improve and help maintain muscle strength
- To gain initial improvement, any exercise must be carried out daily. Thereafter, to help maintain your condition, it is advisable to continue on a regular basis i.e. 3-4 times weekly
- ▲ Swimming can be a very good way of exercising and keeping fit as it causes very little pain. Water supports the body's wieght so that little force goes through the joints as you exercise. Also, warm water relaxes muscles and joints and is very soothing, allowing joints to move more freely.

#### PAIN RELIEF AT HOME

If your knee becomes hot, more painful and perhaps swollen, you should apply an ice pack or a pack of frozen peas wrapped in a damp cloth is ideal. Apply for 15 minutes.

If your knee is not warm or swollen, but aching, heat is the best option - heat packs or hot water bottles wrapped in a towel for 15-20 minutes.

There is no cure for Osteoarthritis but remember, it does not always get worse. By following the simple instructions in this leaflet you will be better able to manage this condition yourself and also greatly reduce the effects of any progression of your Osteoarthritis.



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