

## Information for Patients With Anterior Knee Pain

### What is it and what are the symptoms?

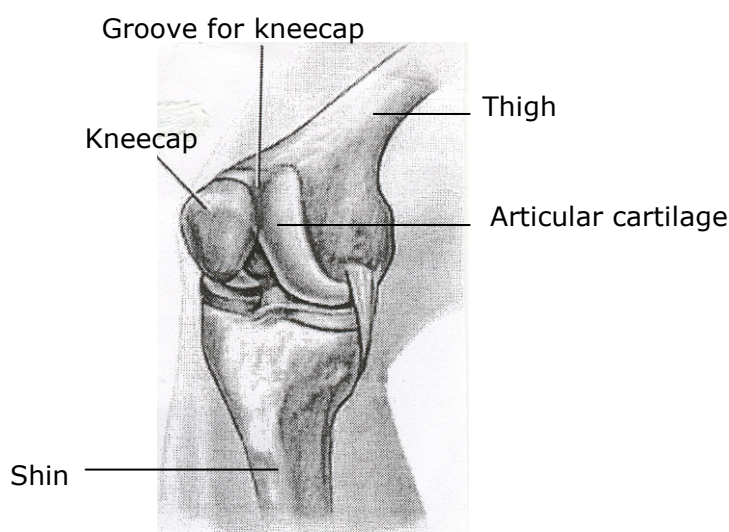
Anterior knee pain, also known as patellofemoral pain, can affect people of all ages. It is often felt as a dull aching pain behind the kneecap (patella). It can affect one or both knees. The pain usually begins gradually, however, on occasions it may occur suddenly following a fall directly onto the knee. Your pain might increase when you are doing activities, which repeatedly bend the knee, for example going up and down stairs, squatting, jumping and running. Prolonged sitting or driving may also aggravate your knee pain.

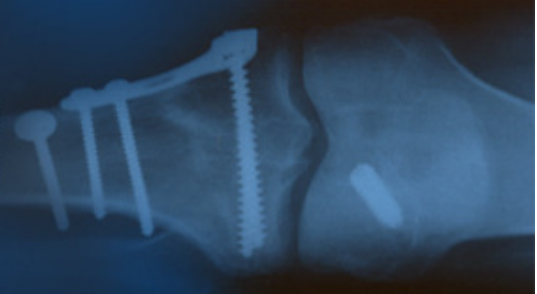
The pain experienced in your knee can cause your thigh muscles to weaken, which can result in your knee giving way or feeling unstable. It is, however, rare for your knee to be swollen.

### Anatomy

The kneecap is the small bone at the front of your knee. In a normal knee the kneecap fits into a groove on the thigh bone, and moves up and down in this groove as you bend and straighten your knee. Where the two bones (kneecap and thigh) contact each other there is a layer of cartilage.

This is similar to the cartilage that you will have seen at the end of a chicken bone. This smooth, shiny surface ensures that when two bones meet they glide and slide over each other without rubbing. This reduces wear and tear stresses across the joint surfaces. This layer of cartilage does wear away over time and can be damaged through injury.





## Patient Information

### Causes of anterior knee pain

Tight muscles around the hip, knee or ankle may cause the kneecap to be held slightly displaced within the groove (malalignment) resulting in pain. This malalignment may cause damage to the cartilage, which can result in pain on bending the knee. As time goes on the cartilage can become roughened resulting in 'noisy' cracking sounds on kneeling, squatting and walking up and down stairs.

Using inappropriate sports shoes or equipment.

Over doing sporting activities.

### Treatment

In the majority of cases surgery is not required. A course of physiotherapy is usually effective in reducing your symptoms and allowing you to return to all your activities.

However, anterior knee pain can be hard to treat and you will need to be patient to see results. It can take up to 3-6 months for your symptoms to improve.

During your knee assessment the physiotherapist will look at the position of your kneecap. They will identify any structures around the knee that are tight or weak.

According to the assessment the physiotherapist will then plan your rehabilitation programme.

As part of this rehabilitation programme you will be given three types of exercises to do:

Stretching exercises for the muscles around your knee.

Strengthening exercises for the muscles around your knee.

Control exercises, which help maintain a good knee position throughout movement, in order to reduce knee pain on functional activities.

Individual physiotherapists may also choose additional treatments if necessary, for example sometimes taping.

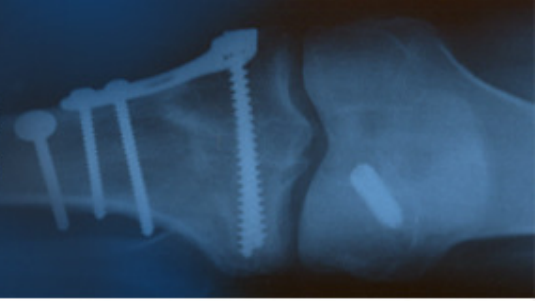
It is important that you comply with the exercise programme if you are to reduce your knee pain. If you fail to attend for physiotherapy, or do not complete your course of rehabilitation you will be discharged back to your GP.

If after completing a course of physiotherapy your symptoms have not improved, you may then be referred to Mr McNicholas, Orthopaedic Consultant, for his opinion.

### General Advice

All exercises should be relatively comfortable to perform.

If you experience pain on a specific exercise, you should **STOP** this exercise, and consult your physiotherapist.



## Patient Information

Swimming may be continued, however, the breaststroke may irritate your knee. To reduce irritation try alternating strokes e.g. backstroke, front crawl, and leg kick. Cycling may be continued, however, if it irritates your knee, try changing the seat position or reducing the resistance on a static bike.

Attending a gym can be beneficial, however, if you experience pain on using any of the equipment, again stop this exercise and consult your physiotherapist.

Allow 48 hours between gym visits to monitor knee irritation.

Rehabilitation can take 3-6 months for this condition. Progress will be slow, so be patient!

If at any time your knee becomes acutely painful, it may be worth using ice to reduce your symptoms.

To do this, make sure the ice is in a sealed bag, and then wrapped in a damp towel. Alternatively a bag of frozen peas wrapped in a damp towel may be used. Apply the ice for no longer than 10 minutes at any one time. You can use ice every hour if necessary, as long as after each hour you remove it after 10 minutes.