Patient Information on Anterior Knee Pain

This booklet is to provide you with information on your anterior knee pain.

What is anterior knee pain?

Pain at the front of your knee is known as anterior knee pain. **The vast majority** of which **does not require surgery and settles with Physiotherapy.**

Anterior knee pain, also known as patello- femoral 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, e.g. going up and down stairs, squatting, jumping and running. Prolonged sitting (or driving) with the knee bent may also aggravate your 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.



The kneecap is the small bone at the front of your knee. In a normal knee the kneecap fits into a groove on the thighbone, 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. Many factors can result in pain in this region.

Causes of anterior knee pain

Tight muscles around the hip, knee or ankle may cause the kneecap to be slightly displaced within the groove (mal-alignment or mal-tracking of the patella) resulting in pain. This can result in 'noisy' cracking sounds on kneeling, squatting and walking up and down stairs.

Over doing sporting activities - 'too much too soon', using inappropriate sports shoes or equipment and other training errors can also result in anterior knee pain.

General 'wear and tear' osteoarthritis can affect the patello-femoral joint, causing pain in this region.

Treatment

A course of physiotherapy, including a graduated return to exercise, is usually effective in reducing your symptoms and allowing you to return to 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.

Physiotherapy

If you are referred for Physiotherapy, a thorough assessment of your knee will allow for an individually tailored rehabilitation programme.

Exercises are likely to include:

- **Stretching** exercises for the muscles around your knee.
- **Strengthening** exercises for the muscles around your knee.
- **Control** exercises to help maintain a good knee position throughout movement, in order to reduce knee pain on functional activities.

Other treatments may include: Electrotherapy, acupuncture, joint or soft- tissue mobilisation and taping.

It is important that you comply with the exercise programme if you are to reduce your knee pain.

General Advice

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, stop this exercise and consult your physiotherapist or gym staff. Allow 48 hours between gym visits to monitor knee irritation.

If at any time your knee becomes acutely painful or swollen, 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.

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

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