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# Front (anterior) knee pain

## **Department of Physiotherapy**

Information for Patients

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## What is anterior knee pain (AKP)?

AKP is a general term describing an ache or pain in and around the front of your knee which involves your kneecap (patella). Anterior simply means 'front'.

It is usually due to a problem with how your kneecap moves up and down when you bend and straighten your leg.

## Who is affected?

- young people during times of rapid growth.
- males and females are equally affected.
- older people with changes to the back of the knee cap caused by arthritis.
- people who take part in lots of sport or exercise.

## What are the symptoms of AKP?

Anterior knee pain is normally a dull ache, though you may have sharp pain with some movements or activities:

- pain behind, above, below or at the sides of your kneecap (patella).
- 'creaking' (crepitus), mainly when going up and down stairs or getting up or down from a chair.
- pain that increases with activity such as running, jumping.
- sometimes there may be swelling around the knee.

#### Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk



## What causes AKP?

- the back of your patella slides up and down in a groove in your thigh bone. If the muscles of your hip of knee are tight or weak, this sliding movement can be affected, which is called patella maltracking. Pain on the under surface of the patella may be due to irritation of the shiny white covering (cartilage). This pain is normally worse with activity such as running.
- In older patients, wearing of the patella cartilage is called osteoarthritis and can cause pain.
- Pain in the tendons where it attaches to the top or base of the patella is likely to be (quadriceps tendinopathy or patella tendinopathy). Tendinopathy is a common overuse injury caused by repeated stress on a tendon. This is also known as runners or jumpers knee.

## How can I help the pain?

- change your activity to a level that does not cause you pain.
- if you start feeling pain, stop doing the activity that brings on your pain. Try the exercises in this leaflet. When your symptoms ease, restart your normal activity gradually. When you first have pain try applying ice in a towel to the front of the knee for 15 minutes. Do this a few times a day and continue for up to 3 to 5 days.
- simple over-the-counter pain medicine can help. Ask your pharmacist for advice.

### **General advice**

- You may not be able to play your normal sport due to pain, but keep active in ways that do not make your pain worse. Try walking short distances little and often and avoid too much rest.
- By setting short and long term goals, you can see how you are progressing and getting better.

### When to seek medical advice:

- If your knee is red, warm to touch and swollen you should call 111 for help right away. These are signs of infection and may need urgent medical treatment.
- If you have tried the advice and exercises in this booklet and your symptoms are not getting better call your GP. You can book an appointment with the first contact practitioner at your surgery.
- You can also fill out a physiotherapy self referral form. You can find this form from your GP reception or on-line at **UHL Physiotherapy Self-Referral form**.
- The aim of physiotherapy is to help you reduce your pain and reach your goals. For example returning to work and / or your normal sports or activities.

**Exercises.** Start these exercises 2 to 3 times daily.







## Exercise 1

Place a rolled up towel under your affected knee. Push the back of your knee into the towel to make it straight. Pull your foot up towards you. Lift your straight leg up. You should feel the muscles on the front of your thigh tighten.

Hold for 5 seconds. Repeat up to 10 times.

### Exercise 2

Lie on your back with your knees bent and arms by your side. Now lift your pelvis up and feel the muscles in your buttocks tighten.

Hold for 5 seconds. Repeat up to 10 times.

#### Exercise 3

Stand holding a support. Raise your heels up, if this does not cause pain in big toes.

Hold for 5 seconds and repeat 10 times.

You can progress this exercise by standing on 1 leg and raising your heel up.

### Exercise 4

Place your affected leg in front of you and straighten your knee. Bend your supporting knee and lean forward from your hips. You should feel the stretch in the back of your thigh muscles.

Hold for 30 seconds. Repeat 3 to 5 times.



### Exercise 5

Stand holding onto a support. Bend your affected knee, taking your heel towards your bottom.

Hold for 5 seconds. Repeat 3 to 5 times. Repeat 10 times.



## **Contact details**

#### **Physiotherapy Departments:**

LEICESTER'S

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