

Physiotherapy Department

Advice for management of Anterior Knee pain

What is Anterior Knee pain (AKP)?

Anterior knee pain is a term used to encompass a wide range of related but significantly different conditions resulting in pain around or behind the knee cap. It is:

- The most common knee problem seen by GP's;
- Often sudden and severe, felt at the front part of the knee;
- Often affects both knees, and there can be clicking, creaking, swelling and raised local temperature at the knee tissues.

What are the causes of AKP?

- The causes of AKP are many, but can be confirmed by careful assessment of the knee, hip and ankle joints, their surrounding muscles and the way the leg moves whilst carrying out a variety of daily activities;
- Occasionally poor foot-ware may be the cause;
- Most cases of AKP are caused by some degree of repetitive strain or direct injury;
- Sudden changes in lifestyles and the levels of exercise can produce AKP also any previous injuries to the lower limb may increase the likelihood of developing AKP.

How can it be treated?

A combination of any of the following may be used:-

- Pain medication;
- Applying ice packs or heat packs;
- Strength and flexibility exercises;
- Strapping or taping to correct the position of a part for example: the patella (knee cap);
- More suitable shoes (avoid wearing high heels);
- Shoe adaptations (such as Insoles; from foot-ware stores, chemist shops or made to measure by a qualified Podiatrist or Surgical Appliances Technician);
- Correction of alignment of the use of **hip, knee and foot** when walking, running, rising from chair and sitting down and when going up or down stairs;
- Very occasionally specialist physiotherapy treatments to promote early healing of damaged or inflamed soft tissues;
- Rarely surgery may be required if all the above have strictly been followed for at least 4-6 months and the symptoms have not been reduced.

General advice

- Take any pain killers/anti-inflammatory medication as prescribed by your GP/Consultant



Patient Information

- Try applying an ice pack or heat pack for 10-15 minutes. Remember to protect your skin when placing an ice pack or heat pack against it. This can be done by a smearing of oil for ice applications and/or a layer of kitchen paper and for heat, wrap the pack in a tea-towel.
- Follow any exercises shown to you by your Therapist or GP for at least four - six months.
- Have a look at your shoes to see how and where they are worn the most, look at the soles and the heel surrounding material. You may need to get new shoes or have them fitted with insoles. Ask your Therapist.
- When you are rising from and going to sit down, take note of whether your feet are in-line with your hips and knees. As you glance down, your knees should not turn inwards of the line of your big toe. The best alignment is when the inner edge of your knee-cap is in line with your 2nd toe. This same alignment is important when ever your knees are being bent and straightened particularly when you are weight bearing (e.g. when walking, running, going up and down stairs).
- You should pay close attention to keeping good length in the following muscles that act over your hip, knee and ankle; your therapist will advise you on this.
 - Front of thigh – Quadriceps
 - Back of thigh – Hamstrings
 - Front of hip – Psoas, Rectus Femoris
 - Side of hip – ITB (Ilio-tibial band), and Gluteus muscles and
 - Piriformis
 - Back of knee/ankle – (calf muscles) Gastrocnemius and Soleus
- You should seek advice on how to strengthen the following muscles:-
 - Quadriceps particularly Vastus Medialis on the inner aspect of your knee
 - Gluteus medius

Exercise sheets are available in Therapy departments. Please ask to be referred to the Physiotherapy department, so that you can be properly assessed and advised on specific exercises appropriate to your individual needs.

Further information

If you need further information or have any questions, please use the contact details below. You may also find the website below helpful.

Therapy departments at either Coventry or Rugby:

University Hospital, Coventry and Warwickshire: Tel 024 7696 6016

Rugby, St Cross Hospital: Tel 01788 663257

<http://www.csp.org.uk/your-health/exercise-advice-all-ages-fitness>

www.arthritisresearchuk.org/

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 6016 and we will do our best to meet your needs.

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