

# Patellofemoral pain

The term patellofemoral pain is used to describe pain felt at the front of your knee, usually under the kneecap (patella).

## Why do I have it?

Patellofemoral pain can be due to many different factors. It is often due to one or a combination of the following:

- Weak thigh muscles and / or hip muscles
- Normal ageing process (osteoarthritis)
- Overuse injuries
- History of previous knee injuries
- Altered working / positioning of the foot and leg

One or more of these factors can mean that the kneecap is not gliding correctly over the thigh bone as your knee bends and straightens. This can lead to the joint becoming irritated and painful.

## Symptoms

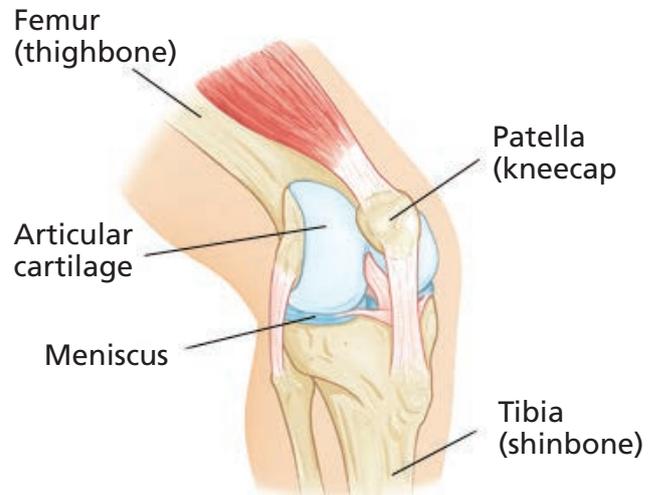
Potential symptoms can include:

- Pain after prolonged sitting
- Pain going up and / or down stairs and steps
- Pain on squatting and kneeling
- Pain localised to the kneecap area
- Crepitus (noises such as clicking, grinding from the knee)

## Self management

If your knee is swollen then using ice can help to reduce swelling. This can be applied by wrapping ice in a damp tea towel and applying it for 10-15 minutes up to 3 times a day. Alternatively if your knees feel cold, try gentle heat with a hot pack wrapped in a towel for 10-15 minutes, or a tubigrip/neoprene sleeve for warmth.

Try to keep your knee moving so it does not get stiff and try some of the exercises overleaf.



Painkillers such as paracetamol and Ibuprofen (if tolerated) in tablet or cream / gel form can be useful, although if you are unsure about taking these please discuss it with your GP or pharmacist.

It is also important to avoid activities that increase your knee pain, such as regular kneeling, crouching etc.

## Physiotherapy

Physiotherapy treatment is likely to involve advice, education and appropriate exercises. The aim of this is to ensure the movement, muscle strength, balance and control of your knee movements is as good as possible. Appropriate loading of the knee is important to help manage the pain and improve the function of your knee. We are unlikely to carry out scans and x-rays of the knee as they may not offer any benefit in terms of treatment options for this problem.

## Footwear and insoles

It is best to wear comfortable, well supporting footwear such as trainers to help keep your feet in a good position and therefore improve alignment at your knee. Trainers also help to reduce any impact going through the knee joints. Sometimes insoles may help to improve this alignment and may be measured and fitted for you by a podiatrist or orthotist.

## Exercises for patellofemoral pain

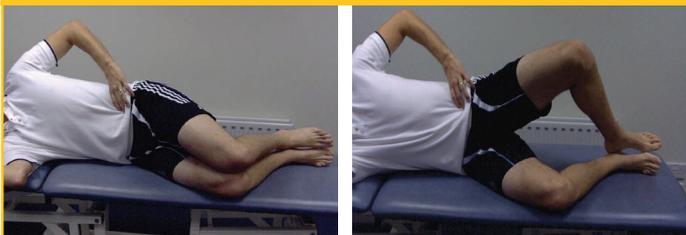
Please note if any of these exercises lead to an increase in your pain please stop them until you have seen your healthcare professional.

### A Quadriceps stretch in side-lying



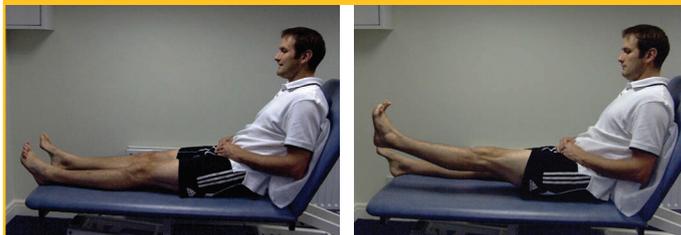
- Lie on your left / right side with a towel round your left / right foot and your hips slightly bent forward.
- Gently extend your hip whilst pulling your foot up towards your bottom.
- When you feel the stretch hold for 30 seconds.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.
- Perform exercise twice a day.

### B Gluteal muscle strengthening



- Lie on your side with affected leg on top and hips bent to 60 degrees, heels together.
- Lift top knee upwards. Ensure hip does not roll backwards.
- Hold for a few seconds and repeat until the muscles around your hip feel tired.

### C Straight leg raise



- Sitting on your bed, keep your right / left leg as straight as possible.
- Lift your leg up approximately 15cm.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.
- Perform 3 sets of this exercise a day.

### D Step ups



- Standing next to step, with support near by if necessary, step up onto step leading with your right / left leg.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.
- Perform ? sets of this exercise a day.

# Anterior knee pain

The term anterior knee pain (AKP) is used to describe pain felt at the front of your knee, usually under the kneecap (patella).

## Why do I have it?

AKP can be due to many different factors. It is often due to one or a combination of the following:

- Weak thigh muscles and / or hip muscles
- Normal ageing process (osteoarthritis)
- Overuse injuries
- History of previous knee injuries
- Altered working / positioning of the foot and leg

One or more of these factors can mean that the kneecap is not gliding correctly over the thigh bone as your knee bends and straightens. This can lead to the joint becoming irritated and painful.

## Symptoms

Potential symptoms can include:

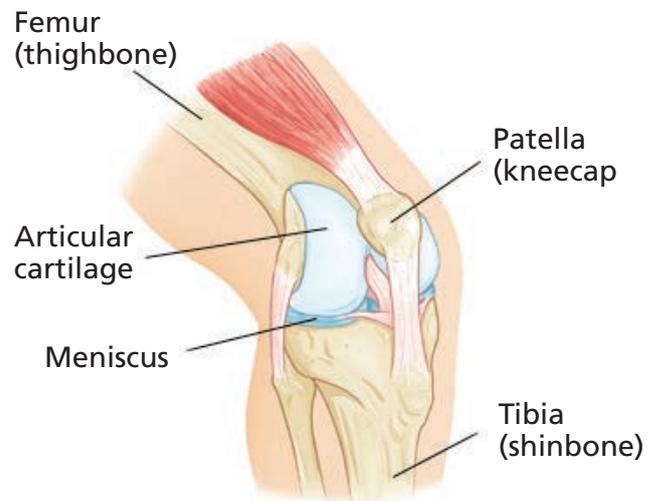
- Pain after prolonged sitting
- Pain going up and/or down stairs and steps
- Pain on squatting and kneeling
- Pain localised to the kneecap area
- Crepitus (noises such as clicking, grinding from the knee)

## Self management

If your knee is swollen then using ice can help to reduce swelling. This can be applied by wrapping ice in a damp tea towel and applying it for 10-15 minutes up to 3 times a day.

Try to keep your knee moving so it does not get stiff and try some of the exercises overleaf.

Painkillers such as Paracetamol and Ibuprofen (if tolerated) in tablet or cream / gel form can be useful, although if you are unsure about taking these please discuss it with your GP or pharmacist.



It is also important to avoid activities that increase your knee pain, such as regular kneeling, crouching etc.

## Physiotherapy

Physiotherapy treatment is likely to involve advice, education and appropriate exercises. The aim of this is to ensure the movement, muscle strength, balance and control of your knee movements is as good as possible. We are unlikely to carry out scans and X-rays of the knee as they may not offer any benefit in terms of treatment options for this problem.

## Footwear and insoles

It is best to wear comfortable, well supporting footwear such as trainers to help keep your feet in a good position and therefore improve alignment at your knee. Trainers also help to reduce any impact going through the knee joints. Sometimes insoles may help to improve this alignment and may be measured and fitted for you by a podiatrist or orthotist.

## Exercises for anterior knee pain

Please note if any of these exercises lead to an increase in your pain please stop them until you have seen your healthcare professional.

### A Quadriceps stretch in side-lying



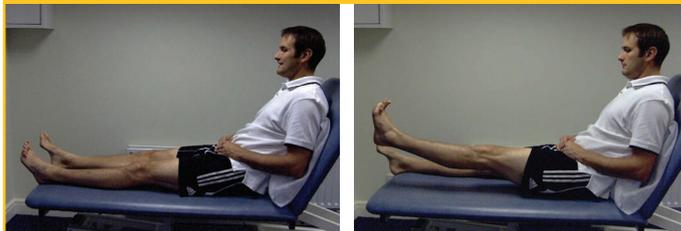
- Lie on your left / right side with a towel round your left / right foot and your hips slightly bent forward.
- Gently extend your hip whilst pulling your foot up towards your bottom.
- When you feel the stretch hold for 30 seconds.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.
- Perform exercise twice a day.

### B Side leg lifts



- Lie on your right / left side.
- Gently tighten lower abdominal muscles then lift your bottom upwards ensuring you keep a neutral lower back position.
- Lift your top leg upwards approximately 50cm.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.
- Perform exercise twice a day.

### C Straight leg raise



- Sitting on your bed, keep your right / left leg as straight as possible.
- Lift your leg up approximately 15cm.
- Repeat this exercise until your muscles feel tired. Stop if your pain significantly increases.
- Perform 3 sets of this exercise a day.

Leeds Community Healthcare NHS Trust accept no responsibility for pain or injury resulting from the use of these information sheets. If you experience an increase in your pain that does not settle, or any other adverse symptoms, please contact your GP or physiotherapist before continuing with the exercises.

### Help us get it right

If you have a complaint, concern, comment or compliment please let us know by speaking to a member of our staff. We learn from your feedback and use the information to improve and develop our services.

If you would like to talk to someone outside the service contact the **Patient Experience Team** on **0113 220 8585**, Monday to Friday 9.30am to 4.30pm or email [lch.pet@nhs.net](mailto:lch.pet@nhs.net)

**We can make this information available in Braille, large print, audio or other languages on request.**