

# Anterior knee pain

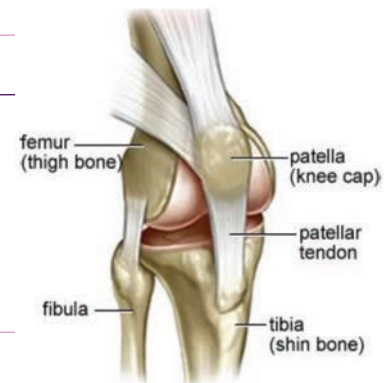
## Information and advice

service enthusiastic hope making a difference choice  
respect community trust together quality understanding dedication hope enthusi  
dedication from the heart independence personal community people together help care understanding specialist or  
service local dependable help equality care choice independence respect commur  
together quality understanding dedication hope enthusiastic specialist compassion safe health service loc

This information is designed to supplement the advice given by your doctor, and is written by physiotherapists based on the latest medical advice.

### What is anterior knee pain?

Anterior knee pain (AKP) is an ache or pain in and around the front of your knee. It is usually due to an irritation of the under surface of the knee cap (known as the patella). Pain results from the pressure of the knee cap as it moves up and down in the shallow groove of the thigh bone when you bend and straighten your leg.



### What are the common symptoms?

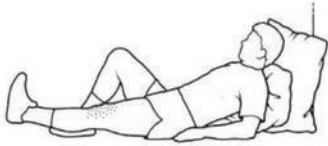
- **Pain** – symptoms vary from a dull ache, to sharp twinges in the front part of the knee. The pain may be aggravated by activities such as walking down hills or down steps, jumping, running or sitting for long periods with the knee bent.
- **Weakness** – the thigh muscles may feel weak and you may have episodes of giving way, especially when walking down stairs.
- **Noises** – you may hear a cracking or feel a grating sensation behind the kneecap when moving the knee.
- **Swelling** – occasionally swelling may be present around your knee.

### What can you do to help your knee?

- **Relative rest** – When the knee pain is severe or increasing, resting the affected joint may be helpful. If you have increased or changed your sports/training program for example then reduce the amount you are doing.
- **Lower limb alignment** – If a particular sporting activity aggravates your symptoms, perhaps check your technique of this activity.
- **Ice** – This may help to ease any inflammation and swelling. Apply ice to the area for 10-20 minutes every three to four hours. A bag of frozen peas wrapped in a damp towel is the best. Please do not do this if your skin sensation is impaired. Never apply ice directly to the skin as it can cause burns.
- **Footwear** – Avoid wearing unsupportive footwear such as flip-flops. Wear shoes that have good support of the foot arch and have cushioned soles, for example trainers.
- **Medication** – Medications can be taken to help ease the pain and inflammation. Ask your GP or local pharmacist for advice.
- **Exercises** – The following exercises will help to improve the strength and flexibility of those leg muscles which may be contributing to your pain.

## Exercises

**Straight leg raise** – Lay on your back with the affected knee out straight. Turn the foot so that the toes are pointing up, keeping the leg completely straight. Lift off the bed six inches and hold for five seconds. Slowly lower.



**Quadriceps stretch** – Stand up holding onto a support. Bend your knee and grab hold of the ankle. Gently pull the heel towards the bottom and hold it for 20 seconds. Make sure that the knee points directly to the floor. Repeat five times.



**Hamstring stretch** – Stand with leg on a step. Lean forward at the hips until a gentle stretch is felt at the back of the knee. Hold for 20 seconds and repeat five times.



**Balance** – Stand on your affected leg only and try to balance. Once you are able to balance for 30 seconds, try with your eyes closed.



**Step downs** – Stand on a shallow step. Step down backwards, leading with the good leg (slowly) until the heel touches the floor. Make sure your knee is in line with your second toe, then return to the starting position.



**Sit to stand** – Sit with your arms out in front of you. Slowly lean forward, stand up and then slowly sit down. Try not to drop into the chair. Progress by straightening out the unaffected leg and pushing up mainly with the affected leg. The lower the chair, the more difficult the exercise.



**If you feel the exercises are making your pain worse, reduce the number or frequency of the exercises or seek advice**

### Legal Notice

Please remember that this information is intended as general information only. We aim to make the information as up to date as possible, but please be warned that it is always subject to change. Please therefore always check specific advice or any concerns you may have with your doctor. Berkshire Healthcare NHS Foundation Trust is committed to the eight principles of the Data Protection Act 1998. We have implemented technology and security policies, rules and measures to protect the personal data that we have under our control from: unauthorised access, improper use, alteration, unlawful or accidental destruction. For further information please contact the Data Protection Officer, Fitzwilliam House, Skimped Hill Lane, Bracknell, RG12 1BQ.



local dependable help equality care choice independence respect community trust together quality  
nce respect community trust together quality understanding dedication hope  
ling specialist dedication safe local support trust dependable hope enthusiastic service making a difference