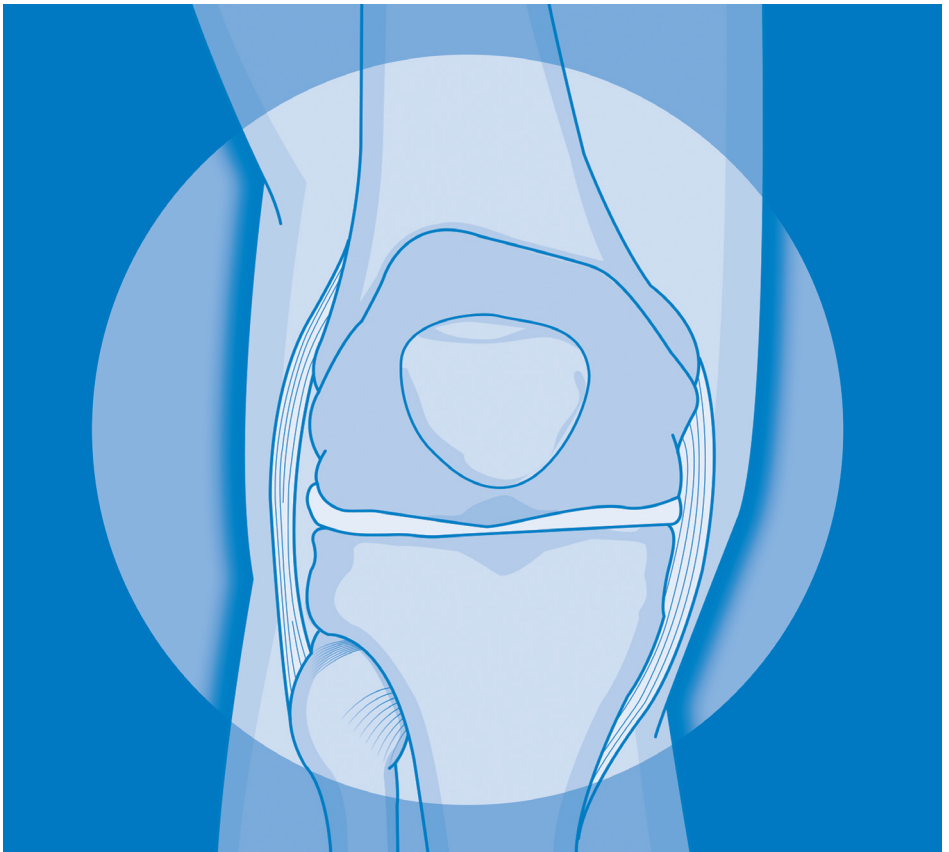


Management of Patellofemoral Pain



What is Patellofemoral Pain?

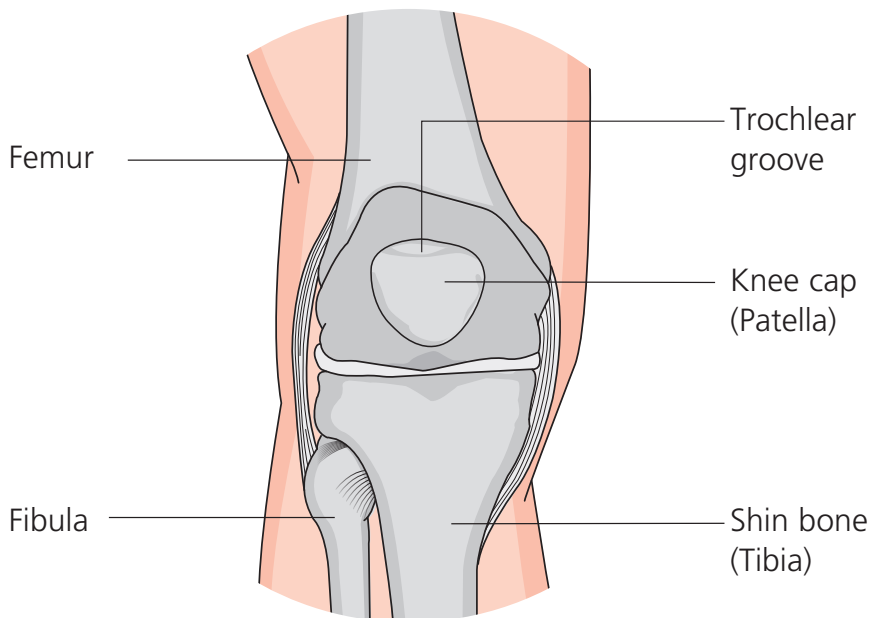
Patellofemoral pain (PFP) is pain around or under the knee cap joint. PFP is a very common condition that affects males and females of all ages and activity levels. Activities that commonly aggravate PFP are prolonged sitting, squatting, going up and down stairs, kneeling, walking, and running.

Other symptoms often reported can include stiffness, clicking, grinding, and a sensation of catching.

What are the causes?

There are no specific causes for PFP, but there are a range of possible factors which increase your risk of developing it.

Your PFP is unique to you, and factors contributing towards your PFP may be different than someone else with the same diagnosis. This leaflet has been designed to increase your understanding of PFP and enable you to manage your condition more effectively.



Risk Factors

Excessive Loading

- Varied and rapid increases in physical activity levels can contribute towards PFP. Increases in load that your knee is not used to can result in the joint becoming sensitive and painful. This can include training for an event or a change of job /lifestyle (figure 1).
- It is advisable to gradually build up physical activity levels. Activity management is a key factor in self-management of PFP (figure 2).

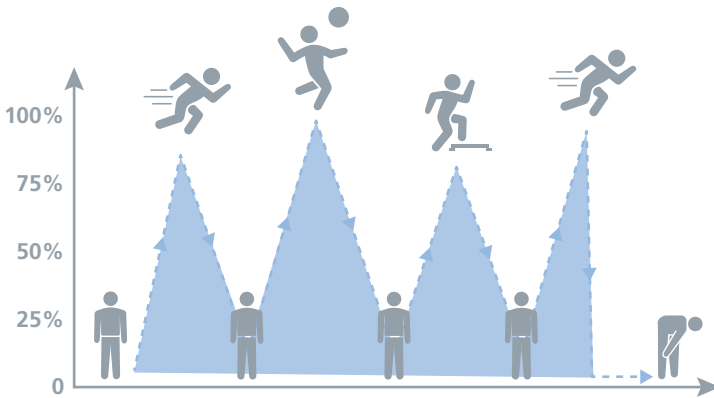


Figure 1, varied and rapid increases to physical activity levels which can lead to patellofemoral pain.

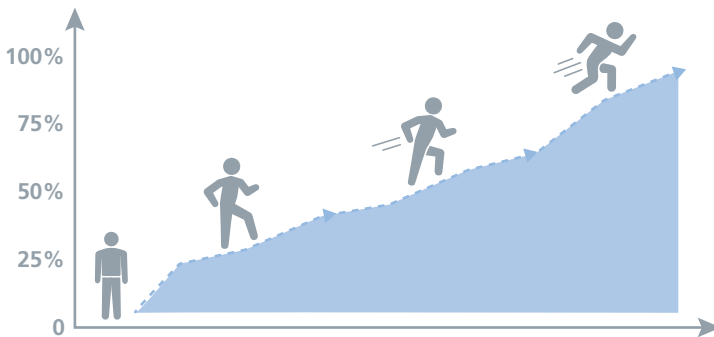


Figure 2, gradual and safe build up in physical activity.

Reduced Muscle Strength

Weakness in the thigh and hip muscles is very common in people suffering with PFP and will reduce the support of the knee cap joint during day to day tasks such as climbing stairs. Exercises to help increase your muscle strength can improve this.

Biomechanics

Altered movement and poor control of your hip, pelvis and foot can increase the stress and strain on your knee cap resulting in PFP. Your physiotherapist will discuss ways to address this.

Other factors such as previous injury or surgery can also contribute to PFP.

Key Areas to Address

Weakness of hip muscles

Weakness of thigh muscles

Ankle and foot mobility



Treatment Options

- **Physiotherapy** is the key method of management for PFP. An individual assessment with a physiotherapist is advisable as this will ensure your treatment and exercises are specifically tailored to your needs. The aim of physiotherapy is to help increase how much load and activity the knee cap joint can cope with.
- **Pain killers** can be useful to help manage symptoms related to PFP and enable you to complete your rehabilitation. Your GP or pharmacist will be able to provide advice on the most suitable pain killers for you.
- **Some people may benefit from seeing a Podiatrist** (foot specialist). Your doctor or physiotherapist can refer you if necessary.
- **Taping** can be used to assist with short term pain relief and assist your muscles to work correctly. Your physiotherapist can show you how to apply tape if you find this method works for you.
- **Weight Loss** If you are overweight this will put additional pressure through your patellofemoral joint making tasks such as squatting and climbing stairs more difficult. Achieving or maintaining a healthy body weight will reduce patellofemoral joint loads that could be contributing to your knee pain. This will also have a positive impact on your general health and help prevent other illnesses such as diabetes and high blood pressure.

Physiotherapy Exercises

Exercises will only help if performed with the correct technique and on a regular basis.

It is normal to have some discomfort in your knee during exercise but this should be mild and settle over several hours. As you become stronger this should become easier.

The following exercises should be done lying on the floor:

Double Leg Bridge

- Lying on your back with both knees bent. Lift hips pushing them towards the ceiling.
- Hold this position for 10 seconds. Repeat for 10 repetitions.



Side Lying Hip Abduction

- Lying on your side, bend your bottom knee for stability. Keep the knee of the top leg straight and lift the top leg upwards.
- Do not allow the top leg to drift / move forwards. To aid this lie against a wall and slide the heel up the wall.
- Repeat 10 times.



Straight leg raise

- Lie on your back straighten your knee and pull your foot towards your head.
- Lift your straight leg 10cm off the bed, hold for 10 seconds.
- Repeat 10 times.



Standing exercises

Ankle Stretches

1. Step forwards leaving your painful leg behind you and straight. Lean forwards keeping your back heel on the floor. You should feel a stretch in your calf. Hold for 30 seconds and repeat 3 times.
2. Step forwards leaving your painful leg behind you and bent. Lean forwards keeping your back heel on the floor. You should feel a stretch in the calf. Hold for 30 seconds and repeat 3 times.



Wall slide

- Stand with your back leaning against a wall with feet shoulder width apart. Slide down the wall by bending your knees. Do not let your knees drift inwards towards each other.
- Stop before your pain starts. DO NOT push into pain.
- Return to straight position. Repeat 10 times.



What Should I expect?

- Unfortunately there are often no quick fixes for PFP.
- Resting from activity or exercise may temporarily relieve symptoms but will not address the underlying causes such as muscle weakness. People often find that pain returns when they start to increase activity again after a period of rest. Modifying your exercise and activities to ones which put less strain through your knee can be a very useful way of staying active while trying to improve your PFP.
- Improvements with rehabilitation are expected over a gradual period of months rather than weeks.
- Maintenance of your specific exercise programme is key to sustain improvements.
- You may need to continue indefinitely to ensure that your problems do not return.
- Surgery for PFP is rarely needed. Outcomes are very unpredictable after surgery and should only be considered in severe cases where all other treatment options have failed.

How do I manage ongoing pain?

Sometimes pain can increase with or without warning. This is a normal feature of PFP. If symptoms do increase then modify your physical activity by decreasing movements which aggravate your pain. Over time gradually build back up to your normal activity levels.

Contact Numbers

Physiotherapy Department: 01274 365277

Opening times: Monday to Friday 8am to 4.00pm

If you need this information in another format or language, please ask a member of staff.

Next Generation Text

We use Next Generation Text for people with hearing difficulties. This used to be called BT Text Relay'

To contact us ring 18001 01274 365277

Smoking

Bradford Teaching Hospitals NHS Foundation Trust is a smoke-free organisation. You are not permitted to smoke in any of the hospital buildings or grounds, with the exception of the smoking shelters which are provided for visitors and patients only.

Physiotherapy appointment details

Date:

Time:

Physiotherapist: