

Contact us

Pharmacy medicines helpline

For information about any medicines that you have been prescribed at Guy's and St Thomas' hospitals, you can speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

t: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Knowledge & Information Centre (KIC)

For more information about health conditions, support groups and local services, or to search the internet and send emails, please visit the KIC on the Ground Floor, North Wing, St Thomas' Hospital.

t: 020 7188 3416

Language support services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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Patello-Femoral Pain (PFP)

INFORMATION BOOKLET



Introduction

Your physiotherapist has diagnosed you with **Patello-femoral pain syndrome**. This booklet provides information on what this means and how physiotherapy can help.

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Notes

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Appointments at King's

We have teamed up with King's College Hospital in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at King's. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Contact details

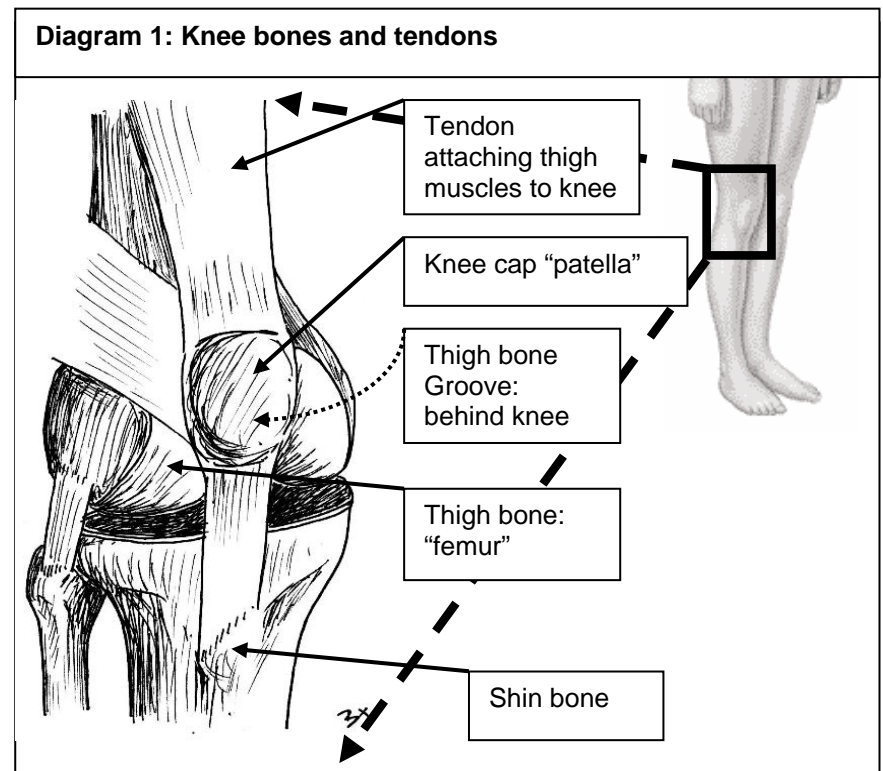
If you have any questions or concerns please contact the Physiotherapy department on **020 7188 5094**
Monday–Friday, 8.30am – 5.00pm

Notes

What is the Patello-femoral joint?

It is formed by contact between the **knee cap** “patella” and the **thigh bone** “femur”. The **knee cap** normally sits in a snug groove on the end of the **thigh bone**.

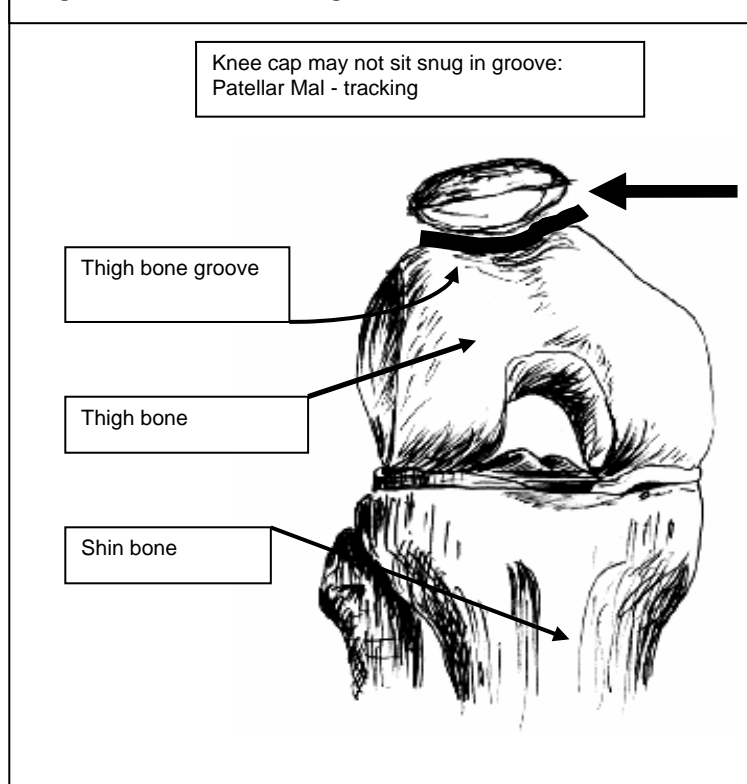
The knee cap acts as a lever for muscles controlling movement of the knee. Such movements are controlled by a number of structures (e.g. muscles) that connect to the knee cap. Together, these structures help to stabilise the knee cap and keep it running smoothly within the groove. (Diagram 1)



This can occur when the knee cap does not run smoothly within the groove of the thigh bone. This is also known as “**patella mal-tracking**” or “**anterior knee pain**” (Diagram 2).

Patella mal-tracking can cause pain and clicking around the knee cap during activities such as **bending, sitting, walking, climbing stairs, running and jumping.**

Diagram 2: Patella mal-tracking



GLUTS: SIDE LEG LIFT



GLUTS: HIP TURN OUT



CARDIOVASCULAR:
TRAMPETTE JOG



QUADS: SINGLE LEG DIP



QUADS: SINGLE LEG PRESS



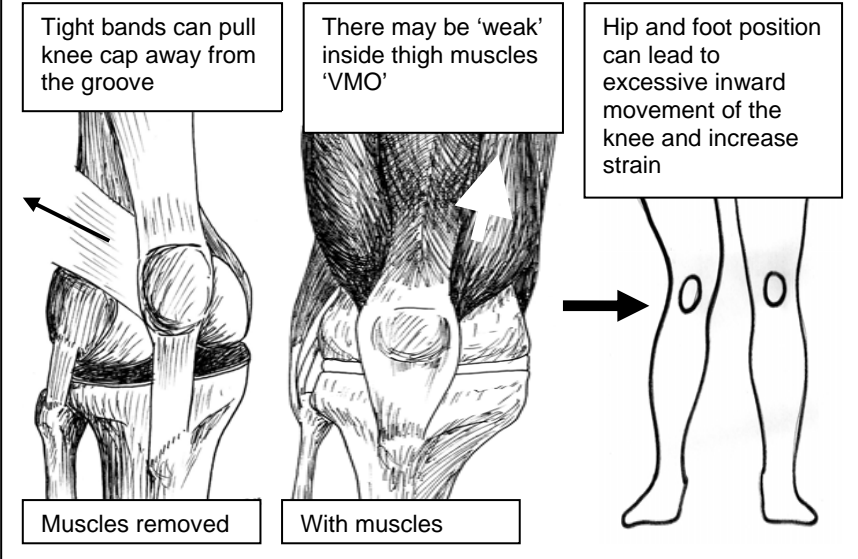
GLUTS: BRIDGING



What are the causes?

There are **no specific causes** for PFP but there are a range of possible factors (Diagram 3).

Diagram 3: Examples of factors leading to Patella mal-tracking



The factors can be grouped under:

Injury

A fall, sporting injury or surgery that affects any of the structures that stabilise the knee cap can lead to patello-femoral pain.

Overuse

You may overuse or overload your knee, for example, going out to run a marathon when the most you normally do is run for a bus.

Natural Body Shape

The natural position of your hip, knee and feet bones can increase the chances of a mal-tracking knee cap. Weakness and tightness of muscles and joints around the hip, knee and it can also contribute to mal-tracking of the knee cap.

What are the symptoms?

- Pain around the knee cap during and/or after activity, this can include sitting for long periods.
- Occasional knee buckling, where the knee suddenly gives way and does not support body weight, normally due to weak muscles.
- Catching, popping or grinding sensation during various activities.

How is it treated?

- **Pain killers** can be used to provide temporary relief. This will give muscles an opportunity to work better.
- **Physiotherapy** is the most effective method of management for PFP. Some people will also benefit from review with a **Podiatrist** (feet specialists).
- **Surgery** for patello-femoral pain may be considered as a **last resort** once all other methods of management for the condition have been explored.

QUADS: SIT TO STAND



QUADS: SQUAT



QUADS: LUNGE



QUADS: STEP UP



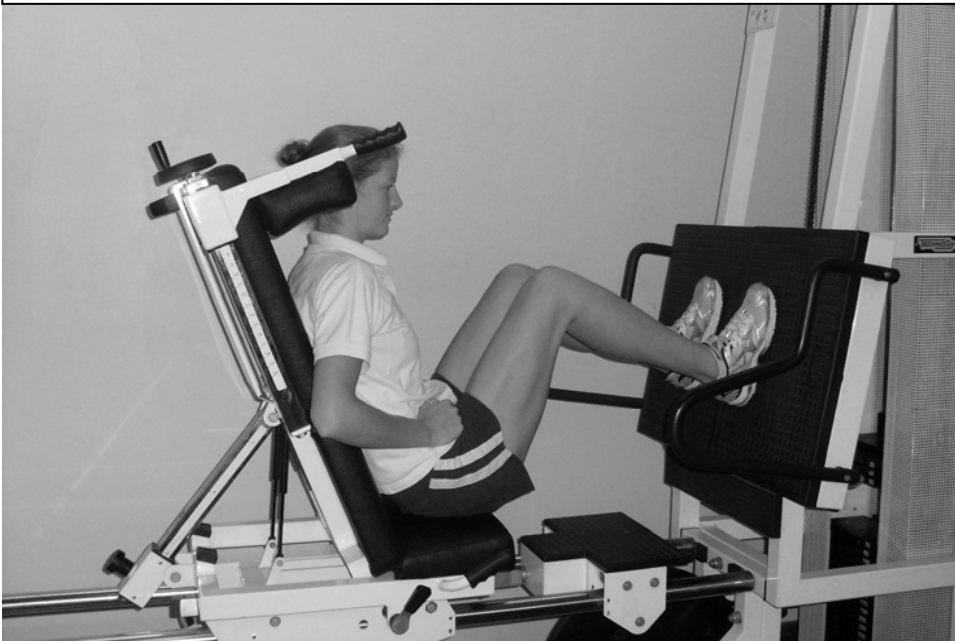
QUADS: SITTING



QUADS: STRAIGHT LEG RAISE



QUADS: DOUBLE LEG PRESS



Surgery can be used to correct the muscle, bony and joint imbalances that cause mal-tracking of the knee cap. However surgery cannot improve the effectiveness of muscles such as the quads (thigh muscles) that are essential for patella tracking. In general, surgical success rates are low.

How will physiotherapy help?

We will identify the various components that may be contributing to your pain and provide a specific rehabilitation program.

This will help to reduce strain through the knee by **stretching** tight structures, **strengthening** weak structures and **modifying your daily activities**.

Successful management requires adherence to a **regular** exercise program. This may include resting from aggravating activities and working to gradually build them back up over time.

How long will it take to get better?

- The evidence on this varies however most exercise programs will run for six weeks. We would expect some improvement in this time.
- During this time **daily** exercises are advised.
- Improvements can continue from months to years.
- We would advise that after 12 weeks it is important to continue your specific exercise program as often as you feel it continues to make a difference.

You may need to continue indefinitely to ensure that your problems do not return. Most people will get back to normal function including sport.

What will happen to the pain?

Fortunately most people will gain somewhere between 60% and 80% improvement with physiotherapy.

Although you may experience discomfort from time to time most of you will return to your normal activities.

How do I manage ongoing pain?

You may sometimes get an increase to your pain, with or without warning. This is normal with patello-femoral joint problems. It is important to reduce the affect from these 'flare-ups' as quickly as possible. During a flare up, aim to reduce your normal activity levels, use ice or heat and take pain killers if you need to. These are only **temporary** measures to help you quickly return to your normal activities. With the correct management, flare ups can be well controlled allowing you to continue with normal activities.

STRETCHES: CALF (a)



STRETCHES: CALF (b)



STRETCHES: QUADS



STRETCHES: HAMSTRINGS

