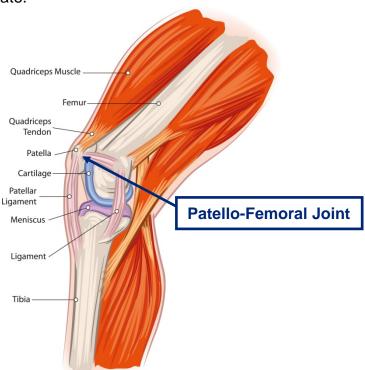


# Patello-Femoral Pain (PFP)

Patello-Femoral pain (PFP) can be characterised by pain over the front of the knee cap area. It is generally aggravated by activities that increase pressure behind the knee cap such as squatting, going up and down stairs and prolonged sitting, as well as repetitive activities such as running.

## Where is the Patello-Femoral joint (PFJ)?

The Patellofemoral joint is where the knee cap (patella) and thigh bone (femur) meet. The underside of the knee cap sits in a groove within the femur which is called trochlear groove. Within this groove the knee cap moves up and down when the knee is bent and straightened, however the knee cap does have the ability to move side to side, tilt and rotate.



### Who can it affect and what are the causes?

PFP can affect both men and women of any age; however it is slightly more common in young adolescents more commonly between 12 – 17 years old. Causes can include:

- Anatomical abnormalities (i.e. incomplete development of patella)
- Muscle weakness in the thigh or buttocks.
- Excessive movement of the knee cap
- Tightness of the muscles and other soft tissues around the knee
- Previous surgery (including arthroscopy, Total Knee Replacement etc)
- Exercise training errors or overuse
- Trauma (can include patella
- dislocation/subluxation)

### **Evidence based management**

Initial rest and a reducing the load on the knee cap is the first step to reducing the pain. The application of ice to the area of pain is also recommended. This can be performed for 15 minutes every hour if necessary. Ensure the ice is wrapped in something such as a damp tea towel or placed in a freezer bag prior to application onto the skin so to avoid an ice-burn. Most cases of PFP will settle within 6 weeks with this treatment. If the pain persists, seeing a physiotherapist to address the underlying cause of why you are experiencing PFP can help develop a specific management plan.

The most effective and strongly supported treatment for individuals suffering with PFP is a physiotherapy program, including education and advice, strength training for the thigh and hip muscles and, flexibility training for the thigh muscles.

Other treatments may include taping, orthotic inserts, bracing and soft tissue techniques which may provide added benefits in select individuals based on their presentation.

## **Medical management**

Over the counter pain relief can often help with pain and discomfort and enable the ability to perform activities of daily living/or exercise.

Over the counter anti-inflammatories, such as ibuprofen, can also help. It is advised that you should take a short course to gauge the effects as long term use of these is not advised. Anti-inflammatory medication is not advised for certain individuals with various medical conditions and you should seek advice from your pharmacist or GP to check if it is safe to use.

Anti-inflammatory creams and gels applied to the surface of the knee may also be helpful; however you should seek advice from your GP to enquire about using these if you already take anti-inflammatory tablets. Using a cream or gel is usually well tolerated as very little is absorbed into the bloodstream. This form of medication is also useful for individuals who are unable to take tablets.

#### **Prognosis**

The majority of individuals suffering from PFP get better with simple treatments and lifestyle adjustments.

If symptoms persist, it is important to access treatment early to prevent longer term pain and minimise the severity of the condition.

Surgery should be avoided in all patients with PFP. However for those individuals who have symptoms that persist despite completing a thorough management programme for 6-12 months, may be considered for an orthopaedic specialist opinion.

#### **Additional support**

Seeking advice, education and referral to physiotherapy can be achieved from your local GP if your symptoms persist.

Self-pay or privately funded physiotherapy appointments at all Horder Healthcare sites

Horder Healthcare health and well being classes

Local low level exercise classes

For further information on Horder Healthcare services please visit horderhealthcare.co.uk