

## PATELLOFEMORAL PAIN SYNDROME

Knee pain is very common in young adults, with as many as 1 in 3 experiencing problems at some time or other. It most often occurs in the teenage years, and is often caused by an imbalance in the muscles surrounding the knee joint, which puts pressure on the kneecap and cartilage within the joint.



### **Causes:**

The causes of patellofemoral pain syndrome are not fully known yet. But it's most likely a combination of factors. Some factors that could lead to it are:

- Weakness or imbalance in the thigh or buttock muscles
- Tight hamstrings (the muscles at the backs of your thighs)
- Short ligaments around the kneecap
- Problems with weight bearing and alignment through the feet.

### **Symptoms:**

The main symptoms are pain and a scratching, grinding or clicking sensation (known as crepitus). The effect of these symptoms on everyday life varies from time to time and from person to person.

**Pain** – The pain is felt in the front of your knee, around and behind the kneecap.

- It can sometimes be quite severe and everyday movements like walking, stair climbing can make it worse.
- It can also cause a dull ache, for example after you've been sitting for a long time.
- It's often aggravated by running and therefore frequently occurs during or after sport.

**Crepitus** – Changes in the surface of the cartilage can produce a scratching or grating sensation from the kneecap, which you may be able to hear when you bend or straighten your knee. Crepitus doesn't often cause pain.

### **Treatment:**

In most cases the knee will get better by itself, without needing any specific treatment. There's no link between this kind of knee pain and generalised arthritis later on in life.

Patellofemoral pain syndrome often gets better on its own without any treatment, though you may have symptoms for several years.

It's important to keep your thigh muscles (quadriceps) strong and balanced to avoid putting pressure on your knee joint.

It may take at least 12 weeks of doing these exercises before any muscle imbalance or weakness corrected, and it could be some time after that until the pain completely settles down.

### **Exercise considerations:**

- Do all the exercises within pain free limits, stretch pain is common with exercises and that should ease off within 30 minutes-1 hour after having done the exercises
- Post exercise soreness is quite common and could be felt up to 48 hours after having done the exercise regime. This should get better as you continue with the regime over time
- If any exercise worsens your symptoms, stop that exercise and seek advice from your physiotherapist.