

## Introduction

Anterior knee pain is pain felt at the front of the knee, usually around the patella (knee cap). This pain is also known as chondromalacia patella, patella chondritis, or patellofemoral syndrome. The commonest cause of anterior knee pain is softening of the cartilage on the underside of the patella.

This causes pain with bending and straightening of the knee. It is most painful when the patella is under stress with activities such as kneeling, squatting or climbing up and down stairs.

Anterior knee pain is not often preceded by a particular injury or obvious cause. It is most commonly seen in females in their teens or twenties.

## Diagnosis

The patient complains of pain at the front of the knee, worsened by kneeling, squatting or ascending and descending stairs. On examination there may be swelling about the knee. There is often tenderness around the patella and crepitus (grinding feeling) when bending and straightening the knee joint. Your surgeon will often further investigate your problem with X-rays and / or MRI scan.

## Treatment

Anterior knee pain most often does not require surgery. The treatment usually involves pain relief, activity modification, and a physiotherapy guided exercise program.

### ACTIVITY MODIFICATION

Avoid stairs and kneeling where possible. At the gym avoid squats. Avoid excessive jumping when playing sports.

### MEDICATIONS

Anti-inflammatory tablets decrease inflammation, which often causes pain about the knee. Caution is advised in those patients with severe indigestion or previous stomach ulcer problems. If stomach pain develops the medication should be discontinued.

## PHYSIOTHERAPY

physiotherapy rehabilitation programs use stretching and strengthening exercises of the muscles about the knee joint. These can often be undertaken at home. You may also require strapping and / or bracing about the knee joint to improve symptoms. Exercises used include:

**Inner range quadriceps:** with a rolled towel under your knee, push the knee flat into the towel and then lift heel off the bed. With the knee straight hold for 10 seconds and then slowly lower the knee. This exercise should be repeated 10 times.

**Straight leg raise:** lying on your back, lift the heel 30 cm off the bed. keep the knee straight and hold for 10 seconds, then slowly lower the leg. This exercise should be repeated 10 times.

**Patella Taping:** this should be supervised by your physiotherapist.

**Bracing:** braces can help alter the weight transfer through the patella (knee cap). Braces are usually only worn during high intensity activity such as sports.

## Surgery

surgery is rarely required for anterior knee pain. It would only be undertaken, in consultation with your surgeon, if you have failed to improve on medication and a physiotherapy program. An arthroscopy is undertaken and the knee joint assessed. damage to the underside of the patella can be smoothed arthroscopically. The results of this surgery are variable. A post-operative physiotherapy program is required and you can return to sports when comfortable.

## After Surgery Timeline

**3** MONTHS TO BE **fair**

**6** MONTHS TO BE **good**

**12** MONTHS TO BE **right**