

# Surgical Options for Recurrent Knee Instability

Some patients will have repeated patella dislocations after the first episode. If non-surgical treatment fails and your patella continues to slip out of the groove, surgery would then be recommended to stabilise your patella.

Surgeries can be broadly divided into soft tissue procedures and bony re-alignment procedures. Your doctor will advise you on the most ideal type of surgery.

## Common Surgical Options

- 1. Medial Patello-Femoral Ligament (MPFL) Reconstruction:**  
It involves taking one of your inner hamstring tendons or from a tissue bank and joining it onto your patella to recreate the torn ligament.
- 2. Release Tight Lateral Patella Tissue**
- 3. Tibial Tuberosity Bony Transfer:**  
This may be necessary if you have significant bony deformity resulting in dislocation of your patella.

The degree of knee pain you experience after surgery depends on the severity of cartilage and bony damage from prior episodes of dislocation. Hence, it is advisable to consider surgery early if you encounter repeated episodes of patella dislocation.

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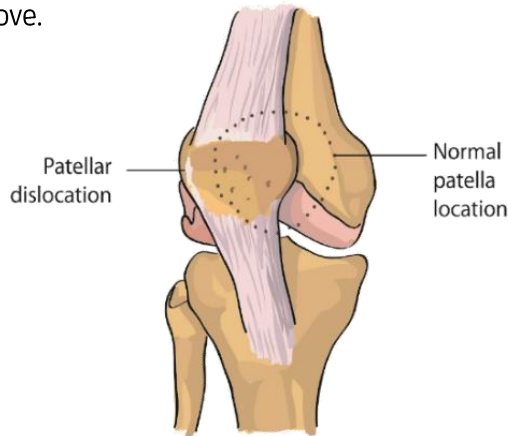
## Department of ORTHOPAEDIC SURGERY

# PATELLAR DISLOCATION



## The Knee Cap (Patella)

The patella is a flat triangular bone that lies in the front of your knee (kneecap). Your patella is held by ligaments and muscles in the groove on your thigh bone. Patella dislocation, or dislocation of the kneecap, occurs when your patella moves out of its groove.



## Common Facts About Patella Dislocation

- The patella usually dislocates outward
- It is most common in adolescents
- It is usually caused by a direct impact in the patella or a twisting injury
- It may be linked to an osteochondral (bone and cartilage) fracture.

## Signs and Symptoms

- **Pain:** Usually felt along the inner areas of your kneecap. Occurs after extended sitting or after activity.
- **Swelling:** Usually comes on quickly and is related to bleeding into your knee joint.
- **Instability:** You may lack the confidence to use your knee in future, as you may feel like it is about to give way during intensive leg activities.
- **Deformity:** Your patella may appear as a lump on the outside of your knee. It may pop back into its usual groove when you straighten your knee.
- **Haemarthrosis:** Bleeding in the knee joint which results in a tense swelling in the knee. The swell may last for one to 1 to 2 weeks after the injury.
- **Tenderness:** Often felt in a localised area on the inner region of the patella. Usually related to the tearing of muscle and ligament attachments.
- **Flat Feet:** You may have associated flat feet, or generalised hypermobility of many joints in the body.

## How is Patella Dislocation Diagnosed?

- **X-rays:** To see if there are any fractures at the inner area of your kneecap
- **Magnetic Resonance Imaging (MRI):** To look for fractures within your joint and to assess the severity of your injury
- **CT scan:** To look at patella tracking and abnormalities in the bone alignment

## Treatments

### 1. Acute Treatment

Your patella often relocates itself spontaneously after an episode of dislocation. If it does not, your doctor may have to manually put your kneecap back into the groove.

**Rest, Ice, Compression and Elevation (RICE)** helps to reduce pain and swelling.

### 2. Immobilisation

After putting your patella back in place, your knee is immobilised using a backslab or knee brace. The period of immobilisation can vary between 2 to 6 weeks depending on the severity of the injury.

### 3. Medications

Pain-relieving medications, including non-steroidal anti-inflammatory drugs, are often prescribed to reduce pain and swelling.

### 4. Physiotherapy

Most patellar dislocations or subluxations (partial dislocations) are effectively managed with physiotherapy to strengthen your quadriceps muscles.

### 5. Surgical Treatment

If the initial injury produces a loose piece of bone and/or cartilage, surgery may be required to remove or fix the fragment.

This may be performed by mini-open surgery or by arthroscopic "key-hole" techniques.