

# Dislocated kneecap and meniscus injury

## **What is a dislocated kneecap and meniscus injury?**

The kneecap (patella) is the bone that protects the knee joint. It rides in a groove at the lower end of the thigh bone (femur) and is held in place by muscles and tendons. A blow or sudden twist can dislocate the kneecap, causing it to move to the outer side of the leg.

The meniscus is a wedge of cartilage in a joint. There are two of them in the knee joint. They cushion and lubricate the joint and reduce friction during movement. The lateral meniscus is on the outer side of the knee and the medial meniscus on the inside. **Twisting or over-extending the knee can cause a meniscus to tear.**

## **What causes a dislocated kneecap and meniscus injury and who is at risk?**

Dislocation of the knee cap is often caused by sports injuries or over strenuous exercise. For example, a sudden change of direction when running, a sharp blow (such as a kick) or a fall may all dislocate the kneecap.

Although women are more prone to dislocated kneecaps than men, defective thigh bones, weak leg muscles or tendons and knock knees make dislocation more likely in both sexes.

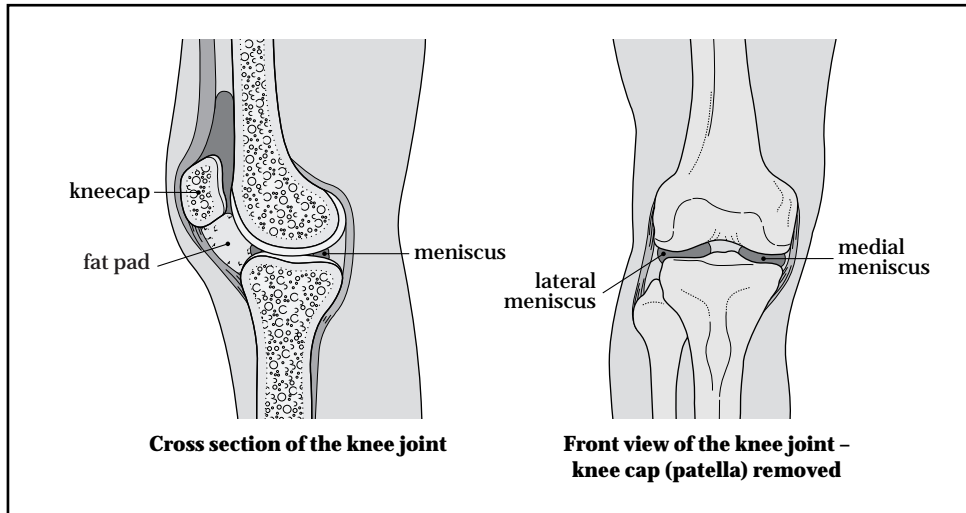
Once the kneecap has been dislocated, it may happen again fairly regularly. Although subsequent dislocations may cause less immediate severe pain and swelling, they may cause chronic pain over a long period.

Twisting or over-extending the knee can cause a meniscus to tear, resulting in pain, swelling and restricted movement. A torn medial meniscus is more common than a torn lateral meniscus.

A torn meniscus is a fairly common sports injury. It is likely to happen when the knee is turned while partly or completely bent (by turning while rising from a squatting position, for example).

## **What are the common symptoms and complications of a dislocated kneecap and meniscus injury?**

A dislocation causes considerable pain and tenderness, especially on the inner side of the joint. You will be unable to straighten the leg.



In some cases of meniscus injury, a distinctive popping sound may be heard when the injury takes place. You may also feel something snap inside your knee.

Swelling may develop several hours after a meniscus injury. There is often a build-up of fluid in the joint aggravating the swelling. There may be pain that gets worse when pressure is put on the area.

You may notice a 'catch' in the knee when walking, as though the bones are rubbing against each other.

### How do doctors recognise a dislocated kneecap and meniscus injury?

A dislocated kneecap is easy to see. The bony knob that usually lies directly in front of the knee shifts to the outer side of the joint. An X-ray is used to confirm the dislocation in cases of doubt.

There are several tests for a torn

meniscus. In the two most common, the doctor will manipulate the leg and ask you to say which actions cause pain and where the pain is. Other tests include:

- a physical examination to detect the presence of fluid in the joint,
- an X-ray or MRI (magnetic resonance imaging) examination,
- other examinations using specialist equipment, such as arthroscopy (an operation in which an instrument is inserted into the joint, allowing the inside of the joint to be examined).

### What is the treatment for a dislocated kneecap and meniscus injury?

#### Self-care action plan

To reduce the risk of knee injuries during sports activities:

- exercise regularly to stay in shape,
- stretch and warm up before starting the

- activity,
- wear kneepads or other suitable protection,
- stick to the proper technique for the activity,
- wear properly cushioned sports footwear,
- train on appropriate surfaces.

If you suspect that you may have dislocated your knee or torn a meniscus do not try forcefully to straighten out or bend your leg.

Place the knee in a comfortable position and give it support. It helps if you lie down and support the knee in a raised position.

Put an ice pack on the knee to relieve pain and prevent swelling. Painkillers or anti-inflammatory medication such as aspirin or ibuprofen may also help.

See a doctor as soon as possible if you think you have dislocated your kneecap or torn a meniscus. You should also seek medical advice for pain or swelling sustained after a knee injury during exercise, sport or an accident.

If you are receiving treatment for a kneecap injury and it does not seem to be getting better after a week or more, go back to your doctor. You should also return to the doctor if there is:

- increasing pain
- weakness
- instability
- new or continued swelling

#### Physiotherapy

After dislocating a kneecap, you may have to wear a knee immobiliser for up to six

weeks to stop the leg bending.

Later, special exercises can restore the knee to health and physiotherapy will help restore strength to the leg and knee joint. While a meniscus is healing, you may need to use crutches.

#### Surgery

Surgery is not usually needed although in severe cases it may be required to repair damaged tissues or remove loose pieces of bone or tissue.

The younger and more active you are, the greater the chance that you may need surgery following a meniscus tear. The surgeon will try to preserve as much of the tissue as possible, because the meniscus is important for proper knee function.

### What is the outcome of a dislocated kneecap and meniscus injury?

Kneecap dislocation is a fairly common injury. It is painful and almost always requires medical attention, although sometimes the kneecap returns to its proper location unaided. The injury is seldom permanently disabling and usually heals completely.

Severe meniscus tears may be slow to heal (up to a year in some cases) but very small ones will heal within weeks.

Occasionally, a torn meniscus does not heal completely, leaving the joint permanently weakened. There is then more chance of re-injuring the tissue, even during moderate exercise.