

Anterior Cruciate Ligament Injuries

The Anterior Cruciate Ligament (ACL) is one of the 4 large ligaments that hold the knee together. It is found in the middle of the knee.

Injuries usually occur without contact whilst playing sport. All of your body weight is on the leg and you twist while your knee is bent. At this point your knee “gives way” and you fall to the floor. Often the knee makes a “popping” sound. You are then unable to continue playing the game. The knee will swell considerably within the first 4 hours due to bleeding from the torn ligament. Injuries can also occur in contact situations, such as a football tackle, and more rarely by the knee bending backwards (hyper-extension).

Women are 2 – 4 times more likely to injure their knee than men when playing the same sport. Netball has the most injuries per hour played of any sport. Football is the commonest cause of injuries in England, due to its popularity.

Any knee that swells within the first 4 hours of injury should have an X-ray to rule out a break / fracture. If the knee is not broken you should be referred to a knee specialist within one week to treat the other possible causes of the bleeding (ACL injury, torn cartilage).

If the diagnosis of an ACL injury is not made after the initial injury the knee usually becomes “unstable” and gives way whenever you try to twist and turn. This usually makes playing sport impossible.

The diagnosis can often be made from the history of the injury and examining the knee. If there is any doubt then a MRI scan will reveal damage to the ACL.

Often at the time of injury other parts of the knee (cartilages / menisci) can be damaged. If the knee is not treated after the initial injury, and becomes unstable, then more damage can occur within the knee. The more damage that happens to the other parts of the knee, the more likely you will develop arthritis when you are older.



Treatment

Physiotherapy will be required after an injury to reduce the swelling and pain within the knee. Physiotherapy will also help you regain the movement within the knee.

If the knee does not go straight within the first 6 weeks from injury an arthroscopy (keyhole surgery) is required to remove whatever is stopping the knee from moving. Reconstruction cannot be undertaken at this point as the risk of limited movement afterwards is too great.

ACL reconstruction is the treatment of choice. This is undertaken when the knee is no longer swollen and painful, and when the knee goes straight. This aims to give you a stable knee that should allow you to play sport again. It reduces your chances of damaging your knee further.

Total Knee Replacement (TKR) is reserved for elderly people who already have arthritic knees.