

Anterior Cruciate Ligament Repair (ACL)

What is Anterior cruciate ligament repair?

Anterior cruciate ligament repair – also known as ACL repair – is a surgical procedure to repair a torn ligament in the knee using a tissue graft from another part of the body.

Who can benefit from an anterior cruciate ligament repair?

Generally, an anterior cruciate ligament is torn during a sporting activity - for example twisting the knee. If you put certain pressure on the anterior cruciate ligament following the rupture – twisting movements for example – this can cause the knee to collapse or 'give out'. Sometimes other parts of the knee may also be affected. People who have suffered a torn ACL often complain that they have heard a 'popping' sound and have severe pain and swelling. In this case, an anterior cruciate ligament repair may be the right course of action.

Procedure

Anterior cruciate ligament repair can be performed using 'open' surgery, but generally most surgeons will use the 'arthroscopic' technique. This type of ACL repair makes it easier to see the procedure, uses smaller incisions and carries fewer risks. You will be placed under a general or spinal anesthesia during surgery. Several small incisions will be made around the knee and a saline solution inserted to clean and expand the area. An arthroscope – a tube with a camera attached – is then pushed through one of the incisions, allowing your surgeon to view the procedure on a TV screen. Holes are then drilled through the incisions and the knee joint, and into the upper and lower leg bones. The tissue graft, which may be taken from the patient or a deceased donor, is then pushed through the holes using special instruments and positioned to replace the old ligament, before being secured at each end using screws or staples. If any other damage has occurred, your surgeon can usually repair this during the same operation. The incisions are then closed and wrapped in bandages.

Recovery period

Following the anterior cruciate ligament repair, you will be assigned a physiotherapist who will help you gain mobility using crutches, as well as give you exercises to help strengthen the knee. You will need to take around two weeks off work (depending on the nature of your job), and avoid driving for as long as necessary (this may depend on which leg has been operated on). You will also have to wear a knee brace following surgery. The recovery period will vary depending on the individual and their lifestyle, and your surgeon and physiotherapist will discuss with you the best recovery procedure for your individual case, including when to resume certain activities (sports for example). Risks Anterior cruciate ligament repair surgery is generally very successful; however there can be complications. These include pain, bleeding, infection to the wound, raised and/or red scarring (keloids), kneecap breakages, discomfort, loss of movement, nerve damage and stiffness. Failure of the replacement ligament to fully graft, which may result in continual 'giving out' of the knee, is also a risk associated with anterior cruciate ligament repair.