

ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

The knee is the largest joint in the human body and it consists of 3 bones: the femur, the tibia and the patella. These bones are joined together by 4 main ligaments. One of the most important ligaments is the anterior cruciate ligament (ACL) which is located between the femoral condyles and has an oblique direction starting from the anterior intercondylar fossa of the tibia and ending on the lateral femoral condyle.

The main role of ACL is to stabilise the knee by opposing the anterior translation of the tibia relative to the femur, thus preventing the anterior “drawer” movement of the tibia relative to the femur. Once torn, this ligament narrows the range of movement and daily activities.

The tearing of the anterior cruciate ligament can have multiple causes, the most frequent being accidents that occur during sports activities: sudden change of direction, sudden stop, incorrect landing after a jump, direct contact or collision etc.

How does it occur?

In case of injury at the level of the anterior cruciate ligament, the patient might hear a kind of “snap” and might feel that the knee is crumbling underneath its own weight.

The immediate symptoms are: pain, followed by the swelling of the knee, the incapacity to perform complete flexion and extension movement, sensitivity of the entire joint, discomfort during movement.

After an accident like this, we recommend the patient to undergo a specialty exam in which the physician performs a local clinical exam followed by a MRI.

Treatment

The recommended treatment in these situations is surgery. The ligament reconstruction is performed arthroscopically, in an adequately equipped operating room, under anaesthesia. The anaesthesia method is established during the pre-anaesthetic exam. The arthroscopic intervention is minimally invasive. The benefits of minimally invasive techniques include: a lower level of pain after surgery, a shorter hospitalisation period, a significant improvement of the recovery time and the fewer risks.

Anterior cruciate ligament reconstruction is an intervention that repairs the knee in order to stabilise the joint and it is recommended to athletes, as well as people conducting sports activities as a hobby.

Ligament reconstruction involves implanting a new ligament obtained from autografts such as the patellar tendon (bone-tendon-bone), the Gracilis muscle and the semitendinosus muscle (soft tissue) etc.

Recovery

The recovery period varies depending on the case, the diagnosis, the patient’s age and degree of receptiveness etc. On average, the recovery period is 6 months; this means that, at the end of said period, you will be able to resume sports activities.

The recovery will begin on the first day after surgery and it will be assisted by a kinesiotherapist. Kinesiotherapy consists of particular exercises, including walking with the support of crutches. The goal is for you to walk normally and to have a flexion of at least 120°, one month after surgery.

After discharge, the complete recovery program can be continued at the [CLINICCO centre for medical and sports recovery](#).

Bear in mind!

If you feel pain and your knee tumefies, followed by limping and joint blockage after suffering a trauma during sports activities, car accidents, or falling, it is recommended that you see an orthopaedist, who will determine the adequate method of treatment. If your condition requires an arthroscopy, please note that this is not a very traumatic surgical intervention, it involves minimal risks and it allows quick recovery.

If you ignore the symptoms and you do not see a physician, simple disorders can have serious consequences that might cause major illnesses.