ACL Rehabilitation

Where evidence-based Physiotherapy becomes an Art

ALO Physiotherapy Clinic

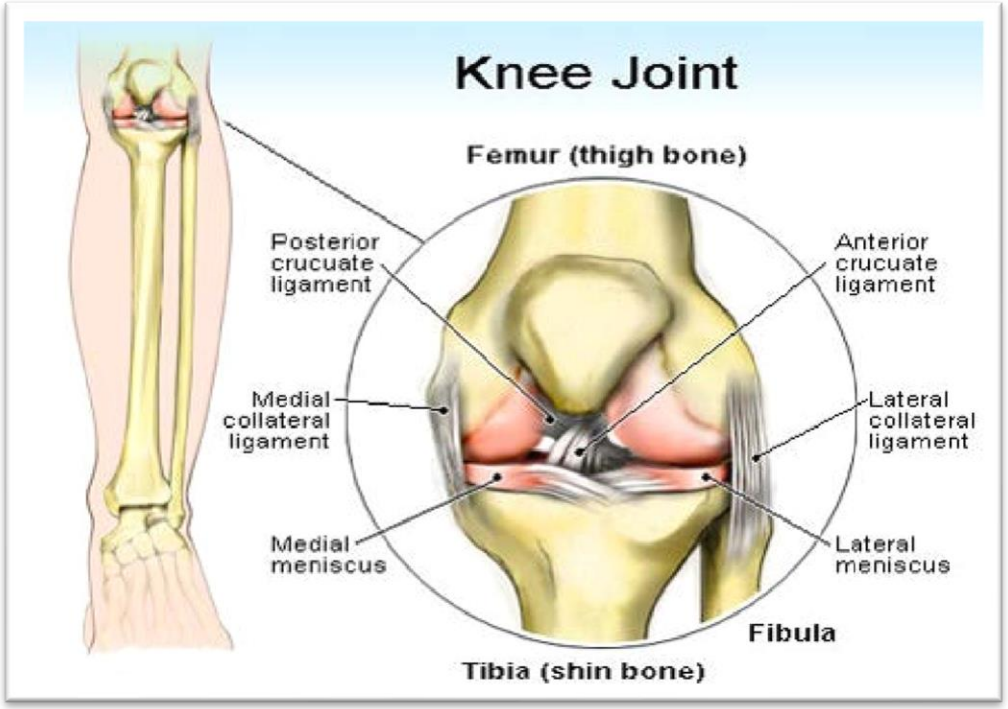
Leading edge Physiotherapy in

Harley Street

Where is your ACL?

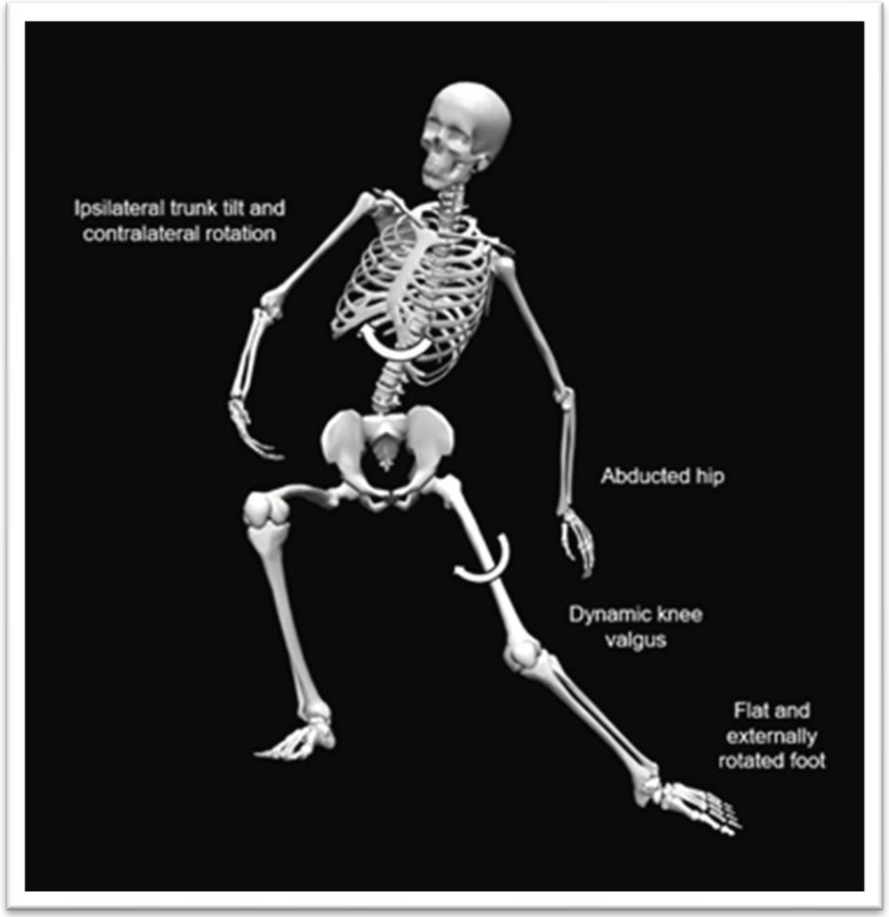
Info regarding ACL's (include basic anatomy and the purpose of ACL). Common mechanism of injury, link to common activities. Types of surgical repairs and conservative management options. Risks associated with not having a repair and risk associated with not completing a comprehensive rehabilitation plan.

The Anterior Cruciate Ligament (ACL) is located deep within the knee joint. It prevents the tibia shifting forwards in relation the femur and provides rotational stability to the knee joint.



How do ACL injuries occur?

The common mechanism of injury for an ACL is non-contact, this usually occurs when trying to decelerate and change direction whilst running at high speed. When the forces put through the ACL outweigh the tensile strength of the ligament it tears. The ACL can also be injured in a non-contact situation when the knee is hyperextended and the tibia is internally rotated under the femur. A contact mechanism can also lead to an ACL tear, this occurs when external forces by an opponent are applied to the need that cause either hyperextension and/or tibial internal rotation when the foot is planted. A complete ACL tear is generally associated with a ‘pop’ sensation or even sound. Due to blood supply and the small compartment, when the ACL is torn it bleeds and either immediately or within 24 hours of the injury the knee becomes markedly swollen.



What happens if I rupture my ACL?

If you happen to have an incident in which you rupture your ACL, you have 2 options. Either have it surgically repaired or manage it conservatively (without surgery). Each ACL injury is unique to the person who has suffered it, with different goals that they want to achieve following the injury. Therefore, each case must be managed according to its merits. A consultation with a health care professional is essential at this point to explore your options and devise the best plan of care for you.

Surgical repair

- **Pros:** Knee stability. Reduce chances of causing further damage to other structures in the knee such as the cartilage. Better outcome when returning to sports that involve jumping, landing and changing direction.
- **Cons:** Infection. Viral Transmission. Bleeding. Numbness. Blood clot. Stiffness. Growth plate injury.

Conservative management

- **Pros:** The risks associated with surgery such as infection, viral transmission, bleeding, numbness and blood clots are not a risk with conservative management.
- **Cons:** Knee giving way. An opportunity for further damage to other structures in the knee.

Your ACL rehabilitation should always be overseen by a Physio!

Regardless, if you have a surgical repair or if conservative management is the route for you. It is essential to have your rehabilitation overseen by a Chartered Physiotherapist. This will ensure all the important factors are considered and addressed during your rehabilitation. Our team of experts at ALO Physiotherapist have an excellent reputation with successful rehabilitation of patients that have had an Anterior Cruciate Ligament injury. Our step-by-step approach has been split in to 5 phases for those that require surgery, a Pre-op phase and 4 post op phases. If you are for conservative management your rehabilitation is split into **4 phases**.

What does each phase consist of?

Pre-op: We will build a stronger base for you to have a head start following surgery. We will increase the muscle strength around your knee before you go in for your surgery. This is done with the knowledge that you will lose strength following surgery due to inactivity, swelling and inflammation will reduce muscle activity early on after surgery.

- **Phase 1:** (or start here if conservative and in the hyper-acute phase): We will reduce the swelling, regain your range of movement, retrain your balance and increase your strength within safe ranges to ensure the optimal environment is attained for your knee. Relearn how to walk with correct form. Implement a return to work if you have an occupation that is sedentary or requires you to be standing. Initiate some cardiovascular training to ensure you are maintaining a healthy heart. This will take us up to 6 weeks. At ALO we will us a combination of electrotherapy modalities, one of which is Tecar Therapy. We are experts and the leading London clinic for Tecar. Our expert clinicians will apply the true benefits and this will reduce oedema, swelling and joint pain post-surgery. We also implement Vibra technology for the stimulation of afferent signals to promote early muscle activation to speed up your recovery. **(Week 0 – Week 6)**

Once your surgical wounds have healed, we will also start Hydrotherapy to maximise the benefits of rehabilitation in the water. We work in conjunction with London Hydrotherapy Limited to ensure optimize each phase of your rehabilitation. Hydrotherapy has amazing effects on the human body. The hydrostatic pressure created in the Hydro Pool will assist with a further reduction in swelling, improve blood flow and promote lymphatic drainage. The Hydro Pool is maintained at 34^{o} – 36^{o}C, this is much higher temperature than your normal swimming pool and this has a therapeutic affect which is enhanced by the expert Physiotherapists.

- **Phase 2:** Your rehabilitation will be progressed, whilst maintaining all the benefits you would have already gained from the first 6 weeks. Additional types of cardiovascular training will be incorporated to your rehabilitation plan, these will be tailored to your specific needs. We will continue to increase your strength to ensure your knee has the required stability to tolerate the demands of daily living. In this phase we will start to see hypertrophy in the muscles of your thigh and calf. Balance training will be developed with more demanding challenges. **(Week 7 – Week 18)**

- **Phase 3:** This is where your rehabilitation will take a noticeable change in terms of the change in activities. We will continue to work with the principles that would have already been conveyed in phase 1 and 2. The progression in this phase will include straight line running, plyometric training, agility training and a return to sport specific activities. These again will be bespoke for your needs and your goals. **(Week 19 – Week 28)**

- **Phase 4:** In the final phase of your rehabilitation, you will feel like you are ready to take on the world. It is imperative that you continue along the journey of your rehabilitation with your plan of care to ensure you achieve your desired goal in a safe manner. In this phase our experienced Physiotherapist will challenge you more, continue with strength, balance, cardiovascular training, plyometric and agility work whilst your sport specific activities are pushed on to replicate the challenges in the environment that you will need to return to. If you play a contact sport, your progressions would include a non-contact training phase followed by an unrestricted training phase prior to a full return to competitive sport. **(Week 29 – Week 36)**

About ALO Physiotherapy Clinic

At ALO Physiotherapy Clinic we will make your rehabilitation journey as smooth as possible, minimising any set backs with tried and tested methods, that we know work for all of our patients. Our expert clinicians will oversee your journey every step of the way and reassure you along the journey should you have any concerns or questions. We will liaise with your Orthopaedic consultant, if you have surgery, to keep them informed of your progress.

If after reading this ebok you believe you may be suffering from an ACL related pain or condition, why not book a **FREE** 15-minute discovery visit with us?

In this complimentary visit you will have a chance to speak to one of our physios about your concerns and condition and we will let you know if physio is right for you.

To book an appointment or a free discovery visit, call us on: **0207 636 8845**