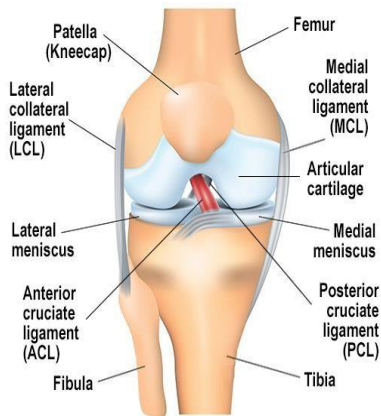


ACL INJURIES

A. What is ACL?



The anterior cruciate ligament (ACL) is one of four major ligaments in the knee joint.

Function:

Maintain the knee's rotational stability

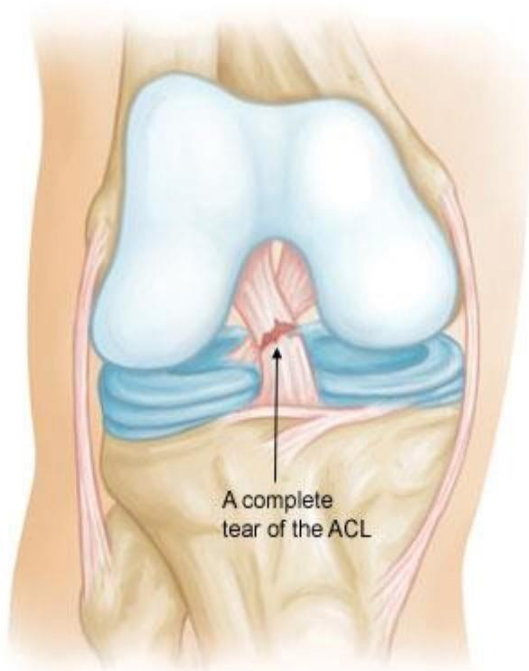
Prevents the tibia (shin bone) from slipping in front of the femur (thigh bone).

Courtesy:

https://www.hss.edu/condition-list_torn-acl.asp

B. What is ACL Tear?

Any disruption in structure of ACL is tear and hampers its function.



Courtesy: <https://orthoinfo.aaos.org/en/diseases--conditions/anterior-cruciate-ligament-acl-injuries/>

C. What can be done?

Many ACL tears will **NOT NEED** immediate surgery.

I. *Nonsurgical Treatment*

When advised?

Early phases of injury to help knee inflammation due to injury to settle.

Treatment:

Rest, Ice Compression, Elevation, Painkillers, physiotherapy.

(Early surgery vs delayed surgery is still controversial topic in medical literature. Author prefer Shared Decision Making with patients considering pros and cons of each approach providing individualized care to every patient)

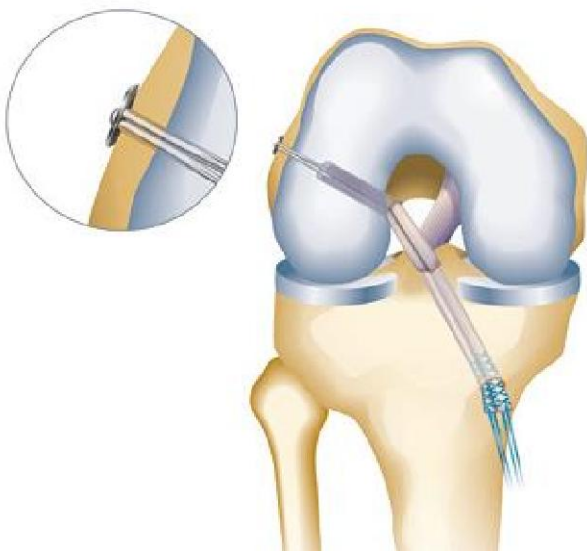
II. *Surgical Treatment*

Recommended when:

1. Young and active patients
2. Mechanical symptoms
3. Failure of ACL rehab

SURGERY

A. ACL RECONSTRUCTION USING GRAFT (Not Repair as failure rate is high)

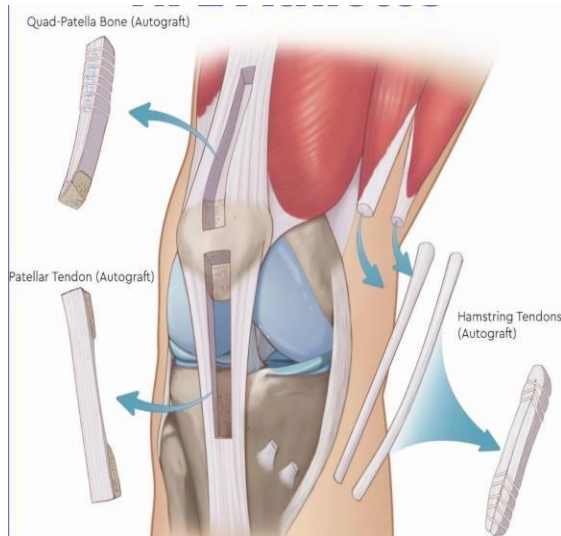


Courtesy: <https://www.gormackorthopaedics.co.nz/acl-reconstruction>

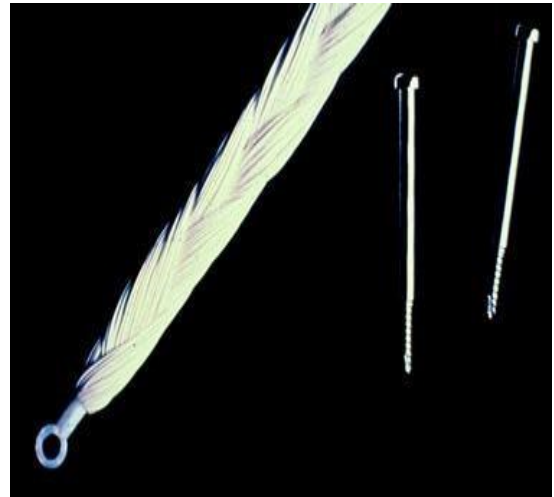
D. What are different graft options for making new ACL?

Multiple options but depends on surgeons choice and patient factors: Commonly used ones are as follows:

1. AUTO GRAFTS (Most Commonly Used)



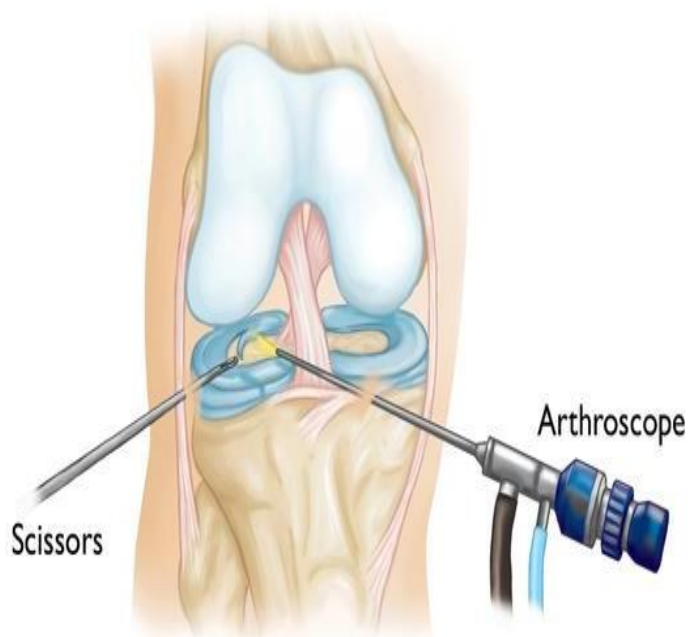
2. Synthetic Graft



Courtesy: <https://www.sportsmedreview.com/blog/acl-injury-graft-trends-nfl/>

E. How is it Done?

Key hole Surgery using camera and instrumentation and small incisions. Additional incisions are required for the graft harvest and augmentation procedures.



Courtesy: <https://orthoinfo.aaos.org/en/diseases--conditions/meniscus-tears/>

F. What are Risks with surgery?

Overall risk: Varies from 1-20% with very small risk of serious complications.

General Risks: These are the general risks with any operative procedure:

Pain, bleeding, scar, infection, stiffness, numbness, nerve vessel tendon damage, CRPS (Complex Regional Pain Syndrome).

Anaesthetic risk:

DVT/PE Clots in leg and lung, MI, stroke, Risk to limb and life.

Risks specific to Meniscal surgery:

Anterior knee pain, stiffness, residual pain, laxity, Retear or recurrence, Failure of graft, Resurgery, contralateral or synthetic graft, Arthritis in long run.

DISCLAIMER: The purpose of this article is simplification of the topic for patient understanding only. For any further understanding and interpretation issues kindly contact the owner for their final clarifications.