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Accelerated Rehabilitation Following LARS ACL Reconstruction

Reconstruction of the ACL using the LARS (Ligament Augmentation and Reconstruction System) is indicated in acute ACL ruptures and in chronic ACL deficiency where there is good preservation of the ACL stump.

The LARS technique allows for healing and repair of the natural ACL using the synthetic LARS graft as a scaffold, whilst also providing strong initial stability to allow accelerated rehabilitation and early return to sport.

Advantages of the LARS technique include the following:

- Anatomic ACL reconstruction as the native ACL is maintained
- No donor site problems. No hamstring weakness, strains or adhesions
- Immediate stability allowing more aggressive rehabilitation
- Better proprioception as the ACL is maintained, not removed
- Faster rehabilitation
- Less post-operative pain
- No graft weak period at 2-3 months post-op. No need to protect the graft.
- Earlier return to full activities and sport

The post-operative rehabilitation program following LARS reconstruction progresses at more than twice the rate of accelerated rehabilitation following conventional hamstring or patellar tendon ACL reconstructions.

Patients undergoing ACL reconstruction using LARS grafts may return to contact sports at 3 months or sooner if proprioception allows.

LARS ligaments are made from polyethylene terephthalate –an industrial strength polyester fibre with a porosity favouring fibroblastic ingrowth, with fibres oriented to mimic the anatomic fibres of the native ACL.

References

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