Anterolateral Stabilization

Lateral Extra-articular Tenodesis (LET) to control knee rotation

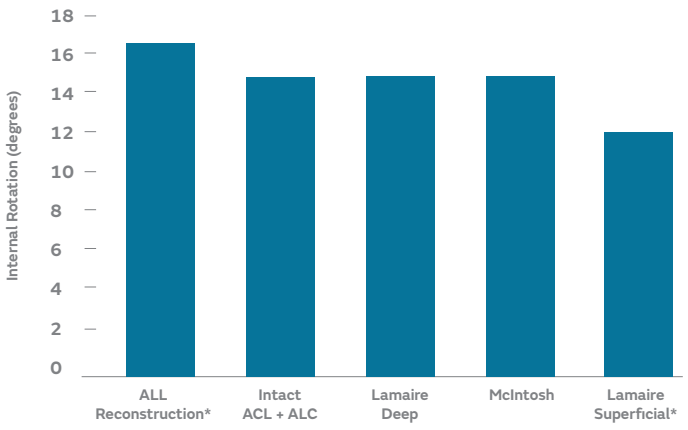
Smith+Nephew

BIOSURE◊
REGENESORB◊
Interference Screw

Opportunity to improve Anterior Cruciate Ligament (ACL) reconstruction

- ACL re-rupture rates can be as high as 25% in young males[1]
- Reviews of ACL reconstruction (ACLR) show that 15% have a residual 'pivot-glide' laxity (anterior translation and internal rotation)[2]
- Anterolateral complex is injured in up to 90% of ACL injuries[3-6]

Internal rotation at 50° flexation[7]

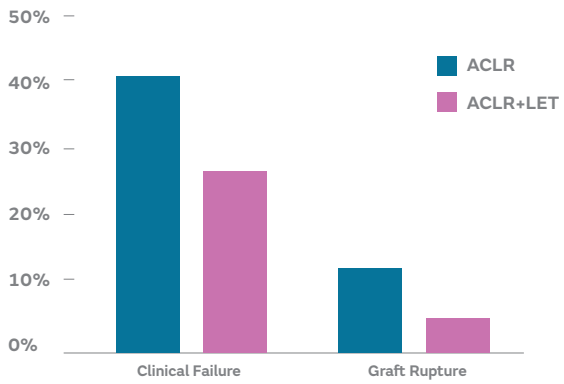


+ LET Procedures restore biomechanics**

- Deep Lemaire and McIntosh procedures restore knee kinematics (internal rotation and anterior translation) after ACL and anterolateral complex injury[7]
- LET procedures reduced rotational and translational laxity better than anterolateral ligament (ALL) reconstruction[7,8]
- LET procedures should have a graft tension of 20N and be performed in neutral rotation to avoid overconstraint of the knee[9]

* Statistically significant difference from intact state
** Based on laboratory cadaveric studies.

Reduced failures with ACLR + LET vs ACLR in high risk patients[11]



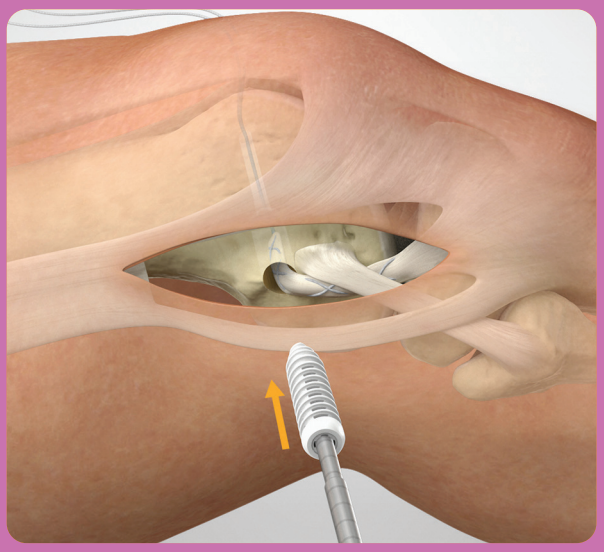
Patient selection is key

- Consensus groups states possible indications for additional anterolateral stabilization[10]:
  - Revision ACL
  - High grade pivot shift
  - Generalized ligamentous laxity
  - Young patients returning to pivoting activities
- LET can significantly reduce pivot shift and failure rates of revision ACL reconstructions from 37% to 20% and 15% to 7% of patients, respectively[11]
- Adding LET procedures to ACLR in high risk patients significantly reduces clinical and graft failure rates from 40% to 25% and 11% to 4%, respectively[12]

+ Fixation placement and strength with LET and BIOSURE◊ REGENESORB◊ interference screw

- LET requires only a single fixation point with an interference screw and can restore normal knee kinematics when fixed at any flexion angle[9]
- BIOSURE REGENESORB screw features advanced biocomposite material with an open-architecture design to allow for bone ingrowth*, which also provides the kind of fixation strength expected with a solid absorbable interference screw**[13-15]
- REGENESORB material is absorbed and effectively replaced by bone within 24 months in clinical and pre-clinical studies[16-18]

* As demonstrated *in vivo*
** Compared to BIOSURE HA interference screws; as demonstrated in benchtop testing



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