Addressing Medial and Lateral Laxity in Revision ACL Reconstruction

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Chronic Collateral Laxity


• Must be addressed as part of revision surgery.

• This laxity may or may not be identified on MRI.
Physical Exam
Collateral Laxity

- Compare closely to the other side
- Slight laxity in flexion can generally be accepted – if identical laxity in full extension
- Any notable difference compared to the normal side in full extension should be addressed
Lateral Side
Isolated Repair of the Posterolateral Corner is generally not indicated in the chronic situation.
Reconstruction Technique
Single Soft Tissue Graft Reconstruction of the Fibular Collateral Ligament & Posterolateral Corner

Reconstruction of FCL and PFL

Posterolateral Capsular Shift

22 year old Female

- ACL reconstruction 3 years prior
- Lateral reconstruction 1 year prior
- No complaints of instability
- Complains of medial pain with activity
Post-op Gait
Medial Side Laxity

• Mild difference in extension (chronic) = Plication (proximal repair)

• Significant opening in extension = Reconstruction (with graft)
Insert MRI slide coronal image, I did one recently – let’s pull the name and I will show you

TO INSERT
MCL Reconstruction with Achilles Tendon Allograft

Marx and Hetsroni, CORR 2012
Reconstruction with Semitendinosus Autograft
46yo female

- ACL injury skiing this past winter
- Surgery in Colorado 2 days later
- Six months later complaining of instability with daily activities
Note: ACL was not revised
Managing Collaterals in Revision ACL surgery: Take Home Messages

- Examine collateral ligaments carefully in full extension and slight flexion pre-op for every revision ACL reconstruction
- Long Leg X-Ray pre-op
- Reconstruct collateral ligaments and/or perform osteotomy as indicated
- Osteotomy can be performed in isolation and then revision ACL reconstruction later if needed
Thank You!
Medial or collateral ligaments must be addressed in ACL reconstruction to:

1. Prevent knee stiffness
2. Reduce risk of ACL graft failure
3. Decrease risk of arthritis
4. Preserve meniscal integrity