Treatment of MCL/PMC in the Multiligament Injured knee

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MCL Repair or Reconstruction

- MCL repair or reconstruction BOTH have acceptable outcome in the setting of combined ligament injuries (Level 4)

- Repair vs Reconstruction of the MCL in the Multiligament Injured Knee: An evidence based systematic review
  – Kovachevich, Shah, Dahm, Stuart, Levy KSSTA 2009
Stannard, SMAR 2010

- 73 MCLs treated surgically in multiligament knee injuries
- Failure rate 20% in repairs
- Failure rate 4% in reconstructions using semitendinosis autograft
MCL in the multi-ligament injured knee

- Every case is different
- If the patient is seen early (within 2 weeks) and they have MCL avulsions that are repairable: consider early repair – with reconstruction as needed
- If severe midsubstance injury and/or the injury is chronic and/or has severe laxity: reconstruction is likely required
- In general, do MORE not less, because if the MCL fails the ACL/PCL grafts may be compromised and fail as well.
Case Example

- 50 year old male
- Fall Skiing 3 days ago
Surgical Technique

Medial Side - Acute

MCL Tibial Avulsion:

• Reattach MCL with suture anchors
Summary: In Acute Situation

- Good tissue: can repair, but only if tissue is excellent quality and if anatomic repair is possible.
Chronic MILD Laxity

Canata Proximal Plication, CORR 2012

**MCL Laxity in the setting of ACL recon:**
- Primary or revision
- Increased medial laxity, not gross
- **Intact, scarred proximal MCL**
- Proximal MCL plication at the epicondyle
Canata technique
Canata et al., CORR 2012
Reconstruction with Semitendinosus Autograft
Downsides of using Semi-T

• Violating the medial side of the knee
• Tendon size
• Donor site morbidity
MCL Reconstruction with Allograft
Achilles Tendon Allograft
Marx and Hetsroni, CORR 2012

- Usually avoid posteromedial plication
- Less stiffness since graft is extra-articular
- Repair soft tissue if possible
Rehabilitation Following Multi-ligament Reconstruction

- Leg immobilized in full extension 2-4 weeks.
- Non weight bearing 2-4 weeks.
- Limit flexion to 90 degrees for 4-6 weeks.
- Follow patients closely every 2 weeks to keep close eye on range of motion.
- Start gait training at 6 weeks if muscle strength adequate.
- Functional rehabilitation as indicated.
Thank You!