When and How I do Meniscal Repairs

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This is a big problem!

Rationale

#1 goal:
Preserve the meniscal and articular cartilage

Save the Meniscus!

My Philosophy on Indications

- All meniscal tears are potentially repairable!
- The younger the patient, the more “aggressive” I am
- Much of my philosophy is driven by my 20+ year experience with meniscal transplants (that is another story for another meeting)

Overview

- General philosophy meniscus repair
  - Indications
  - Techniques
  - Case examples

Philosophy on Technique

I use an inside out technique for repairs

- Prefer vertical mattress sutures
- 2-0 ticron (non absorbable). I do not recommend “fiber wire”
- Occasionally “all inside”
  - Very expensive
  - Not as versatile
**Philosophy on Technique**

- I use fibrin clot for "isolated" meniscal repairs (ACL is intact)
- Post op rehab is slow
  - 4-6 wks on crutches
  - 4-6 months before returning to sports

**Inside-out Repair**

- 2-0 Ticron
- Not fiber wire – it cuts!

**Fibrin Clot (very inexpensive)**

- 60cc venous blood
- Beaker, frosted stir rod
- Gauze Compression
- Cannula Introduction
- Final Clot

**Equipment**

**Incisions**

- Lateral
- Medial

**Case Examples**

- 15 yo Isolated Lateral Meniscus Radial Split Tear
- 19 yo Displaced Lateral Meniscus Tear
- 54 yo Medial Meniscus Root Tear
- 19 yo ACL Tear + Displaced Medial Meniscus Tear
- 21 yo ACL Tear + Medial Meniscus Root Tear + Lateral Meniscus Root Tear + Lateral Meniscus Radial Split Tear

**Case Example**

- 15 soccer player
- Dx: Radial Tear, Lateral Meniscus
**Surgical Technique**

- Arthroscopy
- Rasp
- Inside out repair
  - 3 sutures
- Fibrin clot

**Case Example**

- 19 yo female
- Hx: Knee locked while rising from deep squat
- Dx: Displaced lateral meniscus tear
- Initial ROM 15-90deg
  - Reduction in clinic
  - Knee immobilizer

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**Surgical Technique**

- Arthroscopy
- Rasp
- Inside out repair
  - 7 sutures
- Fibrin clot

**Case Example**

- 54 y/o male
- Medial “pop” while playing tennis
- Dx: Medial meniscus root tear

*This is a devastating injury to the medial compartment*

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**Surgical Technique**

**Root tear**

**Surgical Technique**

**Root tear**

*JBJS 2008*
**Surgical Technique**

- Visualize Root
- **Reverse Notchplasty**
- Insertion Site Preparation
- Suture Tunnel
- Suture Passage
- AO post Fixation
- Tie ~45° of flexion

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**Case Example**

- **ACL/MMT**
  - 19 y/o college wrestler
  - 6'4”, 250lbs
  - (1.93m, 115kg)
  - Twisting injury
  - Knee range of motion 10-90
  - Dx: Acute Gr III ACL, displaced medial meniscus tear

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**Case Example**

- Arthroscopy
- Rasp
- Inside out repair
- Fibrin clot
- Stage ACL
Case Example
- 21 yo female collegiate volleyball player
- Noncontact injury
  - Reinjury later in match
- Dx: ACL, medial root, lateral root, lateral meniscus tear
- ROM 0-115 deg

Surgical Technique
- ACL reconstruction
- HS autograft
- Lateral root repair
- Medial root repair
- Lateral meniscus repair
  - Inside out, 2 sutures

Thank you!