

## Meniscal Repair Protocol

Weeks One, Two and Three	Weeks Four to Eight
<b>Initial Evaluation</b>	<b>Evaluate</b>
<ul style="list-style-type: none"> <li>➤ Range of motion</li> <li>➤ Joint hemarthrosis</li> <li>➤ Ability to contract quad/vmo</li> <li>➤ Gait (generally immobilized in extension/WBAT)</li> <li>➤ Inspect for infection/signs of DVT</li> <li>➤ Assess RTW and sport expectations</li> </ul>	<ul style="list-style-type: none"> <li>➤ Gait</li> <li>➤ Range of Motion</li> <li>➤ Patella position and related symptoms</li> </ul>
<b>Patient Education</b>	<b>Patient Education</b>
<ul style="list-style-type: none"> <li>➤ Support Physician prescribed meds</li> <li>➤ Ensure compliance w/ pre-op hep</li> <li>➤ Reinforce use of brace and assistive device</li> </ul> <p style="text-align: center;"><b><u>Precautions</u></b></p> <ul style="list-style-type: none"> <li>➤ <b>Do not flex past 90 degrees, or combine flexion and WB</b></li> <li>➤ <b>If medial meniscus repair no hamstring PRE's until Four weeks</b></li> <li>➤ Discuss frequency and duration of treatment (2-3x/wk is expected for the first 8 weeks, followed by intermittent appointments over another 6-8 weeks)</li> </ul>	<ul style="list-style-type: none"> <li>➤ D/C brace if good quad contraction</li> <li>➤ Ensure compliance w/ pre-op HEP</li> <li>➤ Begin flexion ROM beyond 90 degrees as tolerated at 5 weeks</li> <li>➤ <b>Weight bearing activity is not to be performed in greater than 90 degrees of flexion</b></li> </ul>
<b>Therapeutic Exercise</b>	<b>Therapeutic Exercise</b>
<ul style="list-style-type: none"> <li>➤ Review and update pre-op hep</li> <li>➤ May complete AROM and Isometrics within surgical precautions</li> <li>➤ Should include early weight shifting and proprioception</li> </ul>	<ul style="list-style-type: none"> <li>➤ Initiate bicycle (do not force flexion)</li> <li>➤ Initiate hamstring PRE</li> <li>➤ Continue with pain free isotonic exercises.</li> <li>➤ Initiate closed chain exercises in limited ROM 0-60 degrees (begin squatting activity, total gym, leg press, step ups)</li> <li>➤ Progress balance activity to single leg stable surfaces, and bilateral unstable surfaces</li> </ul>
<b>Manual Techniques</b>	<b>Manual Techniques</b>
<ul style="list-style-type: none"> <li>➤ Grade I and II patella mobilizations</li> <li>➤ PROM as tolerated (focus on extension, flexion should be pain free)</li> <li>➤ Incision mobilization (week two)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Grade III-IV patella mobilization</li> <li>➤ Posterior capsule mobilization as needed</li> <li>➤ Incision mobilization as needed</li> </ul>
<b>Modalities</b>	<b>Modalities</b>
<ul style="list-style-type: none"> <li>➤ NMES / Interferential</li> <li>➤ Ice</li> </ul>	<ul style="list-style-type: none"> <li>➤ Modalities may be used as needed</li> </ul>
<b>Goals</b>	<b>Goals</b>
<ul style="list-style-type: none"> <li>➤ Control pain</li> <li>➤ Reduce joint hemarthrosis</li> <li>➤ Restore voluntary quad contraction</li> <li>➤ Independence with post-op precautions</li> <li>➤ 0-90 degrees pain free ROM (focus on early extension)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Normal gait pattern without brace or assistive device</li> <li>➤ Normal ROM by week 6</li> <li>➤ Quad strength at least 4/5 by week six</li> </ul>

Weeks Eight to Twelve	Weeks Twelve to discharge
Evaluate	Evaluate
<ul style="list-style-type: none"> <li>➤ Patella mobility / crepitus</li> <li>➤ Balance / single leg stance</li> <li>➤ HEP compliance</li> </ul>	<ul style="list-style-type: none"> <li>➤ Any excessive joint laxity</li> <li>➤ Address any deficits that may limit return to work or sport goals</li> <li>➤ HEP compliance</li> <li>➤ Isokinetic Strength test and/or functional testing for comparison to be completed only upon physician request</li> </ul>
Therapeutic Exercise	Therapeutic Exercise
<ul style="list-style-type: none"> <li>➤ Progress Isotonic strength training to include movement in multiple planes and single leg activity</li> <li>➤ Progress balance activity to single leg dynamic activity and unstable surfaces 8 to 10 weeks</li> <li>➤ Cardiovascular training at 8 weeks (bike, swim and elliptical)</li> <li>➤ May begin CFA at 8 weeks with physician approval</li> <li>➤ May initiate running activity with physician approval (No cutting, pivoting, or jumping)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Continue strength and conditioning</li> <li>➤ Encourage participation in the CFA</li> <li>➤ Sports specific exercises</li> <li>➤ Complete agility and running activity with physician approval</li> <li>➤ May begin bilateral low level plyometrics with physician approval</li> </ul>
Goals	Goals
<ul style="list-style-type: none"> <li>➤ 4+/5 strength with manual testing by week 10</li> <li>➤ Good stability across tibiofemoral joint particularly with single leg balance and control of terminal knee extension</li> <li>➤ May complete exercise independently with intermittent follow up appointments if above criteria is met</li> </ul>	<ul style="list-style-type: none"> <li>➤ Minimal to no pain</li> <li>➤ 5/5 strength with manual testing</li> <li>➤ Discharge to full work or sport activity</li> </ul>

**Precautions and related issues**

The decision to repair a tear in the meniscus is based largely on the location of the tear. Tears in the peripheral third of the meniscus are more likely to heal due its vascular nature. These tears will typically be repaired in younger, active patients. Post operatively these patients will need to avoid combined WB and flexion in the first four weeks. Axial loading will often be allowed in full extension if the area has sufficient vascularity and good fixation. Please contact the physician if there is any question regarding WB status or presence of repair vs. meniscectomy. Meniscal repair may be done in conjunction with other surgery or injury often slowing the rehab process. Some of the typical concerns are listed below.

**Tibial Osteotomy**

- FWB will not be completed for at least four weeks
- Resistance distal to the osteotomy site should not be completed for the first four weeks. This includes cuff weights, which should be placed more proximally if used.

**MCL injury**

- No modification required in most cases

**PCL reconstruction**

- Follow PCL protocol as it will be a slower rehab than meniscal repair

**ACL reconstruction**

- If completed in conjunction with ACL reconstruction, begin with meniscal repair protocol and change to ACL reconstruction protocol at four weeks post-op