

Meniscal Repair PT Protocol

The following protocol has been designed as a guideline for rehabilitation after knee arthroscopy with meniscal repair. Progression from one phase to the next is based on **functional criteria more so than the time elapsed since surgery**. The timeframes identified in parentheses after each Phase are *approximate* times for the average patient, **NOT** guidelines for progression.

Key Factors in determining progression of rehabilitation after meniscal repair include:

- Anatomic site of tear
- Suture fixation (failure can be caused by too vigorous rehabilitation)
- Location of tear (anterior or posterior)
- Other pathology (ligamentous injury)

Phase I: Maximum Protection (*surgery to 6 weeks*)

- **Goals:**
 - ROM 0-90°
 - Control inflammation & swelling
 - Strengthen quads
- **Weightbearing:** WBAT with crutches
 - Begin to wean crutches at 4 weeks
- **Bracing:** Hinged knee brace
 - Locked at 0° when ambulating
 - May unlock at 4 weeks as tolerated
 - Flexion limited to 30-40° initial post-op depending on repair site
 - May advance to 90° beginning at 3 weeks as tolerated
- **Cryotherapy:** Cold with compression/elevation
 - First 24 hours or until acute inflammation is controlled: every hour for 15 min.
 - After acute inflammation is controlled: 3x a day for 15 min
- **Range of Motion:** Only perform range as allowed by the constraints of brace
- **Therapeutic Exercises**
 - Quad isometrics: QS, SLR
 - HS isometrics
 - Side-lying hip AB/AD
 - Ankle pumps & heel raises
 - At 4 weeks may introduce
 - Mini squats (<90°)
 - Cycling w/o resistance
 - Step-ups (forward only)
 - Limited knee ext 90-30°
- **CRITERIA FOR PROGRESSION TO PHASE 2**
 - ROM 0-90°
 - Normal gait
 - Quad control

- No change in pain/effusion

Phase II: Moderate Protection (*approx. weeks 6-10*)

- **Goals**
 - Full ROM
 - Improve strength & endurance
- **Bracing:** wear brace with activity
- **Range of Motion**
 - Bike: rocking-for-range → riding with low seat height
 - Flexibility stretching for all major groups
- **Therapeutic Exercises**
 - Quads: Mini squats (90°), lateral step-ups
 - HS: curls, resistive SLR with sports cord/TB
 - Hips: AD/AB with SLR/bands, multi-hip machine with proximal resistance
 - Neuromuscular training: wobble board, rocker board, single-leg stance w/wo equipment, slide board, fitter
 - Cardiopulmonary: bike, elliptical, stairmaster
- **CRITERIA FOR PROGRESSION TO PHASE 3**
 - Full, pain free ROM
 - No pain or tenderness
 - SLR w/o lag
 - Normal gait without brace

Phase III: Advanced (*approx. weeks 11-15*)

- **Goals**
 - Increase power & endurance
 - Emphasize return to skill activities
- **Strengthening:**
 - Continue PRE progression
 - Increase plyometrics
 - Initiate running program
 - Pool program (if available)
- **CRITERIA FOR DISCHARGE FROM SKILLED THERAPY**
 - Non-antalgic gait
 - LE strength at least 4/5
 - Independent with HEP
 - Normal, age-appropriate balance and proprioception
 - Resolved palpable edema

This protocol has been adopted from Brotzman & Wilk, which has been published in Brotzman SB, Wilk KE, Clinical Orthopaedic Rehabilitation. Philadelphia, PA: Mosby Inc; 2003:315-319.