

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
 - o 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.
 - o 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

Robert S. Williams, MD



- Quad control
- No change in pain/effusion

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

- Goals
 - o Full ROM
 - Improve strength & endurance
- **Bracing:** wear brace with activity
- Range of Motion
 - Bike: rocking-for-range \rightarrow 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
 - o Cardiopulmonary: bike, elliptical, stairmaster

• CRITERIA FOR PROGRESSION TO PHASE 3

- Full, pain free ROM
- No pain or tenderness
- o 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 Orthopeadic Rehabilitation. Philadelphia, PA: Mosby Inc; 2003:315-319.