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# **Meniscal Repair Rehabilitation Protocol**

The following are guidelines for the post-operative rehabilitation of an individual who has undergone a Meniscal Repair. This schedule will vary from patient to patient based on their physical exam/findings, individual progress, and/or the presence of post-operative complications. This guideline is intended to be administered by a licensed physical therapist and/or certified athletic trainer. If there are any questions concerning the rehabilitation, please don't hesitate to call our office.

### \*Progression to the next phase based on Clinical Criteria and/or Time Frames as Appropriate\*

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--Weeks 1-6:

### Goals:

- Diminish inflammation and swelling
- Restore ROM
- Reestablish quadriceps muscle activity

### Stage 1: Immediate Postoperative Day 1- Week 3

- Ice, compression, elevation
- Electrical muscle stimulation
- Brace locked at 0 degrees for ambulation
- ROM 0-90°
  - Motion is limited for the first 7-21 days, depending on the development of scar tissue around the repair site. Gradual increase in flexion ROM is based on assessment of pain and site of repair (0-90 degrees only for first 4 weeks).
- Patellar mobilization
- Scar tissue mobilization
- Passive ROM

#### Exercises

- Quadriceps isometrics
- o Hamstring isometrics (if posterior horn repair, no hamstring exercises for 6 weeks)
- Hip abduction and adduction
- Weight-bearing as tolerated with crutches and brace locked at 0 degrees
- Proprioception training with brace locked at 0 degrees

### Stage 2: Weeks 4-6

- Progressive resistance exercises (PREs) 1-5 pounds.
- Progress ROM (non-weight-bearing active flexion greater than 90°)
- Limited range knee extension (in range less likely to impinge or pull on repair)
- Toe raises
- Mini-squats less (than 90 degrees flexion)
- Cycling (no resistance)
- PNF with resistance
- Unloaded flexibility exercises

## Phase II: Moderate Protection--Weeks 6-10

### Criteria for progression to Phase II:

- ROM 0-90 degrees
- No change in pain or effusion
- Quadriceps control (MMT 4/5)

#### Goals:

- Increased strength, power, endurance
- Normalize ROM of knee
- Prepare patients for advanced exercises

#### **Exercises:**

- Strength-PRE progression
- Flexibility exercises
- Lateral step-ups
- Mini-squats

## **Endurance Program:**

- Swimming (no frog kick), pool running- if available
- Cycling
- Stair machine

### **Coordination Program:**

- Balance board
- Pool sprinting- if pool available
- Backward walking
- Plyometrics

## Phase III: Advanced Phase--Weeks 11-15

## Criteria for progression to Phase III:

- Full, pain free ROM
- No pain or tenderness
- Satisfactory clinical examination
- SLR without lag
- Gait without device, brace unlocked

### Goals:

- Increase power and endurance
- Emphasize return to skill activities
- Prepare for return to full unrestricted activities (restricted from running for 3-4 months postop)

#### **Exercises:**

- Continue all exercises
- Increase plyometrics, pool program
- Initiate running program

### **Return to Activity: Criteria**

- Full, pain free ROM
- Satisfactory clinical examination

# **Criteria for discharge from skilled therapy:**

- 1) Non-antalgic gait
- 2) Pain free/full ROM
- 3) LE strength at least 4/5
- 4) Independent with home program
- 5) Normal age appropriate balance and proprioception
- 6) Resolved palpable edema