



## **After Meniscal Repair**

### **Rehabilitation Protocol**

Key factors in determining progression of rehabilitation after meniscal repair

- ❖ Anatomic site of tear
- ❖ Suture fixation (too vigorous rehabilitation can lead to failure)
- ❖ Location of tear (anterior or posterior)
- ❖ Other pathology (PCL, MCL, or ACL injury)

#### **Phase 1: Maximum Protection-Weeks 1-6**

Stage 1: Immediate postoperative Day 1-Week 3

- ❖ Ice, compression, elevation
- ❖ Electrical muscle stimulation
- ❖ Brace locked at 0 degrees
- ❖ ROM 0-90 degrees
  - ✓ 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 (0-30, 0-50, 0-70, 0-90 degrees)
- ❖ Patellar mobilization
- ❖ Scar tissue mobilization
- ❖ Passive ROM
- ❖ Exercises
  - ✓ Quadriceps isometrics
  - ✓ 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

Stage 2: Weeks 4-6

- ❖ Progressive resistance exercises (PREs)-1-5 pounds
- ❖ Limited-range knee extension (in range less likely to impinge or pull on repair)
- ❖ Toe raises
- ❖ Mini-squats
- ❖ Cycling (no resistance)

- ❖ Surgical tubing exercises (diagonal patterns)
- ❖ Flexibility exercises
- ❖ Ice after exercise as needed

### **Phase 2: Moderate Protection-Weeks 6-10**

#### Criteria for Progression to Phase 2

- ❖ ROM 0-90 degrees
- ❖ No change in pain or effusion
- ❖ Quadriceps control ("Good MMT")

#### Goals

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

#### Exercises

- ❖ Strength-PRE progression
- ❖ Flexibility exercises
- ❖ Lateral step-ups (30 sec X 5 sets - 60 sec X 5 sets)
- ❖ Mini-squats
- ❖ Isokinetic exercises

#### Endurance Program

- ❖ Swimming (no frog kick)
- ❖ Cycling
- ❖ Nordic-Trac
- ❖ Stair machine
- ❖ Pool running

#### Coordination Program

- ❖ Balance board
- ❖ High-speed bands
- ❖ Pool sprinting
- ❖ Backward walking

#### Plyometric Program

### **Phase 3: Advanced Phase-Weeks 11-15**

#### Criteria for Progression to Phase 3

- ❖ Full, nonpainful ROM
- ❖ No pain or tenderness
- ❖ Satisfactory isokinetic test
- ❖ Satisfactory clinical examination

#### Goals

- ❖ Increase power and endurance
- ❖ Emphasize return-to-skill activities
- ❖ Prepare for return to full unrestricted activities

### Exercises

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

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

- ❖ Full, nonpainful ROM
- ❖ Satisfactory clinical examination
- ❖ Satisfactory isokinetic test