

MENISCAL REPAIR REHABILITATION PROTOCOL

This protocol provides general guidelines for initial stage and progression of rehabilitation according to specified time frames, related tissue tolerance and directional preference of movement. The intent is to provide the therapist with a general framework. Twin Cities Orthopedics staff will provide contact information for further individual-specific rehabilitation progression consultation and general questions regarding specific patients. Please fax initial assessment and subsequent progress notes directly to Dr. Corey Wulf at 952-944-0460.

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
- Weight bearing as tolerated with brace locked at 0 degrees
- Okay to unlock brace while non-weight bearing (i.e. seated, lying down)
- 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).
- 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
- Proprioception training with brace locked at 0 degrees

Stage 2: Weeks 4-6

- Gradually increase to full weight bearing with brace unlocked
- Progressive resistance exercises (PRE's) 1-5 pounds
- Limited range knee extension (in range less likely to impinge or pull on repair)
- Toe raises
- Cycling (no resistance)
- PNF with resistance
- Unloaded flexibility

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 at 8-10 weeks (less than 90 degrees)

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

Exercises:

- Continue all exercises
- Increase plyometrics, pool program
- Initiate running program
- No deep squats until 4-6 months

Return to activity: Criteria

- Full, pain free ROM
- Satisfactory clinical examination

Criteria for discharge from skilled therapy:

- Non-antalgic gait
- Pain free/full ROM
- Quad strength at 80-90% of contralateral side
- Independent with home program
- Normal age appropriate balance and proprioception
- Resolved palpable edema