

ISOLATED MENISCAL REPAIR PROTOCOL

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A. **Initial Maximum Protection Phase:** (roughly first month post-op)

- 1. Modality Care for Pain and Effusion (must prevent quad shutdown)
 - a. ice compression elevation
 - b. Electrical stimulation to quadriceps
- 2. Brace Range of Motion: 0-90° passive ROM allowed within confines of brace.
- 3. Weight Bearing Status
 - a. toe touch to PWB for first 3 weeks with knee locked in brace in full extension
 - b. 50% PWB for weeks 3-6.
- 4. Manual Therapy
 - a. patellar mobilizations
- 5. Exercise: (in brace)
 - a. Quadricep Isometrics
 - b. 4-plane SLR
 - c. Passive range of motion
 - d. Single leg cycling of uninvolved leg and/or UBE

B. **Subacute Initial Mobilization Phase** (roughly 2nd month)

General Goals: Gradual return to FWB status and development of muscular endurance (not strength).

- 1. Modality Care prn ice post activity or exercise; compression and elevation prn
- 2. Weight Bearing Status: (suggested progression)
 - a. weeks 3-6 50% PWB
 - b. after 6 weeks full weight bearing without protection of brace
- 3. Exercise Program: (possibly still in brace)

- a. gradual increases in resistance to 4 plane SLRs with careful monitoring of varus/valgus stresses.
- b. Protected Arc Open Chain Knee Extension based on repair site
- c. Open chain surgical tubing resisted hip, knee, and ankle exercises.
- d. Initiation of proprioception training:
 - 1. soleus pumps heel raises progression
 - 2. NWB/PWB BAPS Board
 - 3. Supine Quad Press with low resistance
- e. Lower Extremity Flexibility Program with exception of quadriceps stretching
- f. Stationary Cycling with mild pedal tension. Progressively out of brace during cycling.

C. Intermediate Functional Strength Improvement Phase: Months 2-5

General Goals: Emphasis on strength, power, endurance, functional activities, and normalizing lower extremity flexibility

- 1. Exercise Program: (out of brace)
 - a. Quadricep stretching can be initiated slowly
 - b. Lower Extremity Progressive Resistive Exercise can now slowly progress towards full arc ranges of motion
 - c. Low intensity, high repetition hamstring curls initiated
 - d. Weight Bearing Exercises:
 - 1. Mini-Squats
 - 2. Lateral Step Ups
 - 3. Standing BAPS Board
 - e. Isokinetic Exercise high speed work to avoid compressive and shear forces.
 - f. Cardiovascular Training:
 - 1. Pool Therapy walking/kicking
 - 2. Stationary Bike
 - 3. Elliptical Machine
 - 4. Stairclimbing device

D. Return to Activity Phase – 5-6 months post

General Goals: Preparation for return to sport or occupational demands

- 1. Functional Progression:
 - a. Progressive Plyometric Program if relevant to patient goals

- b. Coordination Activities hops, side-steps, crossovers, cariocas, etc.
- c. Walk-Run Progression Protocol over 4-8 weeks
- d. Agility Training
- 2. Functional and Isokinetic Evaluation Prior to Return to Sport/Occupation

REHABILITATION PROGRAM SUMMARY:

- 1. Immediate protected motion post-operatively (0-90° for month)
- 2. Locked in full extension if early weight bearing; FWB at 4-6 weeks
- 3. Neoprene Compression Knee Sleeve effective to decrease swelling and provide support
- 4. Slow, gradual progressions based on healing requirements
- 5. Alter program according to objective findings of pain over repair site and/or swelling
- 6. Protect meniscal repair by avoiding ROM which stresses the repair
- 7. No resistive flexion for 2 months
- 8. No squats or twisting activities for 3-6 months
- 9. 4-6 month restriction on athletic activity