

## Knee Meniscus Repair Protocol

### General Guidelines:

1. Partial weight bearing with crutches and a brace for 6 weeks
2. No knee flexion beyond 90 degrees for the 1<sup>st</sup> 4 weeks
3. Avoid adduction straight leg raise initially with medial meniscus repair or abduction leg raise with lateral meniscus repair
4. No hip extension or hamstring work for 6 weeks with posterior horn repair

### Phase I: Maximum Protection Phase (Weeks 1-4):

The patient should be PWB with 2 crutches and the brace locked at 0 degrees for ambulation.

At 2 weeks post op, the brace may be drop locked up to 90 degrees for sitting

#### Exercises:

- Patellar mobs
- Calf stretch
- Hamstring stretch
- Ankle pumps
- Quad sets- independently and with electrical stimulation if needed
- Flexion leg raises & abduction/adduction/extension leg raises per surgical precautions
- Multi-angle quad isometrics
- Clamshells for gluts and hip abductors
- Active assisted knee flexion range of motion seated on the side of the table up to 90 degrees
- At 2 weeks, add LAQs for quad 90-30 knee flexion
- At 3 weeks may begin pool therapy in chest deep water: SLR flexion and abduction, walking forward, partial squats, heel raises, unilateral stance
- At week 3 add weight shifts

### Phase II: Moderate Protection (Weeks 5-6):

Gradually wean from crutches and discontinue the use of the brace as long as the patient exhibits good quad control.

#### Exercises:

- Heel slides to increase range of motion as tolerated
- Bike- start with no resistance
- Terminal knee extension with theraband resistance to start
- Initiate remaining straight leg raises (i.e. abduction/adduction/extension leg raises that were previously held)
- Minisquats 0-45 degrees
- Heel raises
- Cone walking for balance
- Progress weight used for LAQ
- Backward walking on treadmill with incline if needed to promote terminal quad control

### **Phase III: Minimal Protection (Weeks 7-11):**

Begin more aggressive strengthening for quads and initiate hamstring strengthening

Exercises:

- Hamstring curls- begin standing or prone with cuff weight and progress to weight machines
- Bridges
- Multi-angle hip machine
- Leg press
- Leg extension machine 90-15 degrees
- Wall sits to 60 degrees
- Step ups in multiple planes
- Lateral touchdowns for eccentric control
- Theraband walking
- Smith Press squats to 60 degrees
- Minilunges
- Progress unilateral balance activities
- Elliptical machine
- Range of motion activities to progress to full range of motion

### **Phase IV: Advanced Phase (Weeks 12-16)**

All strengthening activities can be progressed as tolerated with a goal of increasing strength, power and endurance. Emphasis should be placed on functional and pre-sport activities.

The patient should return to follow up with their orthopaedic surgeon for clearance to begin running and agility program.

**Criteria for return to sports:**

- Completion of running and agility program without pain
- Quad strength 85-90%/ Hamstring strength 90%
- Good proprioception/balance
- Functional testing (functional hop test, forward & lateral excursion testing, lateral touchdowns)  
85% of uninvolved leg