



# Meniscus Repair Rehabilitation Protocol

## Phase 1 (0-6 weeks post-op)

### Rehabilitation Goals

- Protect the surgical repair
- ROM: 0°- 90° or as dictated by type of repair
- Regain adequate quadriceps control; no extensor lag
- Minimize pain and swelling

### PRECAUTIONS

- Wear brace **AT ALL TIMES** (even when sleeping)
- **NO FLEXING** knee with load applied (i.e. squat or leg press)

**NOTE:** bending knee and PWB are allowed, but NOT at the same time

### Crutches

- Weight Bearing:
  - Begin as foot flat, NWB
  - Progress gradually only when wearing brace locked at 0°
- Repair of radial, complex, and meniscal root tears:
  - Weeks 1-6: NWB to foot flat WB only
  - NOTE: may need to modify based on surgical report
- Repair of bucket-handle, vertical, and longitudinal tears:
  - Weeks 1-2: PWB @ 0-25% body weight (progress as tolerated with knee locked in extension)
  - Weeks 3-4: PWB @ 25-50% body weight
  - Weeks 5-6: PWB @ 50-75% body weight

### Cryotherapy:

Cold with compression/elevation (ice with compression wrap)

### Rehabilitation

- Begin scar massage after incision has healed and scar is formed
- Begin patellar mobilizations after suture/staple removal

Dr. Mark Slabaugh

Orthopedics and Joint Replacement | Mercy Medical Center

 410-539-2227  410-539-2240

301 St. Paul Pl. Baltimore MD 21202





# Meniscus Repair Rehabilitation Protocol

## Weeks 1-2

- Calf pumps with theraband
- Assisted heel slides within the limits of 0°-90°
- Quad sets (use e-stim until patient is able to do 10 SLRs without extension lag)
- Supine passive extension with towel under heel
- Gentle HS and calf stretching
- Hip/glute muscle endurance exercises

## Weeks 2-4

- Continue progressing exercises from Weeks 1-2 as appropriate
- Short arc quads; add light weights as tolerated
- Seated ankle ROM and proprioceptive training
- Gait training progression as needed
- UBE

## Weeks 5-6

- Leg press 0°- 60° (NOTE: when ROM > 85°)
- Hip extension endurance exercises
- Stationary bike 0-100° knee ROM
- Beginner level pool exercises when incisions are fully healed; primarily in the sagittal plane (i.e. no breaststroke or whip kick motion)  
Only gait training and deep water jogging

## Follow up

- Supervised rehab: 2-3x per week
- PT re-eval: every 1-2 weeks
- Ortho re-eval: ~7-10 days and 6 weeks

Dr. Mark Slabaugh

Orthopedics and Joint Replacement | Mercy Medical Center

 410-539-2227  410-539-2240

301 St. Paul Pl. Baltimore MD 21202





# Arthroscopic Knee Rehabilitation Rehabilitation Protocol

( Meniscal Debridement, Chondroplasty, or Meniscectomy)

## Phase 2 (Generally 7-12 weeks post-op)

### Rehabilitation Goals

- Normal gait and stair ambulation
- Full knee ROM

### PRECAUTIONS

Sport-specific training initiated when quadriceps strength is at least 80% of uninvolved limb

### Crutches

Progress gradually to FWB by 12 weeks

### Brace

D/C brace if there is adequate quad strength and ROM

### Rehabilitation

- Continue Phase 1 exercises as needed
- Progress to the following exercises and increase intensity gradually when patient is ready (i.e. no increase in knee pain or effusion since the previous exercise session)

**NOTE:** all resisted exercises should start with low weights, high reps, and in a ROM with minimal pain

### Weeks 7-8

- Stationary bike for conditioning  
Begin with 5-10 minutes and progress gradually
- Gait training  
Cone walking, marching, retro-walking, exercise band, etc.
- General LE stretching  
Calf, HS, quads, hip flexors, and hip adductors
- Begin light elliptical/stair master when gait is normalized
- Progressive LE strengthening (i.e. calf press, leg press, squats 0°- 60°, and HS curls). **NOTE:** Emphasis is placed on knee extension strength.

### Weeks 9-10

- Progressive neuromuscular training  
Body blade, plyoball, rebounder, platform training, etc.  
Progress in duration and intensity  
DL to SL
- Progressive strengthening with light resistance  
Calf press, leg press, squats (progress in depth), hip abd/add, HS curls, etc.

### Weeks 11-12

- Gradual progression of stationary bike, elliptical, and/or stairmaster for conditioning
- Progressive pool program as tolerated

### Follow up

- Supervised rehab: 2-3x per week
- PT re-eval: monthly
- Ortho re-eval: ~12 weeks post-op





# Arthroscopic Knee Rehabilitation Rehabilitation Protocol

( Meniscal Debridement, Chondroplasty, or Menisectomy)

## Phase 3( 3-6 months post-op).

### Rehabilitation Goals

- Jog at own pace and distance without pain
- $\geq 90\%$  isokinetic quad and HS strength compared to the uninvolved limb
- $\geq 90\%$  SL hop for distance and crossover hop test compared to the uninvolved limb
- Meet occupational requirements at 4-6 months

### PRECAUTIONS

NO PARTICIPATION in contact sports or physically demanding military schools until cleared by Ortho

### Brace

None

### Rehabilitation

- Continue Phase 2 exercises as needed
- Progress to the following exercises and increase intensity gradually when patient is ready (i.e. no increase in knee pain or effusion since the previous exercise session)

### Weeks 13-16

- Stationary bike for conditioning  
Begin with 5-10 minutes and progress gradually
- Gait training  
Cone walking, marching, retro-walking, exercise band, etc.
- General LE stretching  
Calf, HS, quads, hip flexors, and hip adductors
- Begin light elliptical/stair master when gait is normalized
- Progressive LE strengthening (i.e. calf press, leg press, squats  $0^\circ$ -  $60^\circ$ , and HS curls). **NOTE:** Emphasis is placed on knee extension strength.

### Weeks 17-26

- Progressive neuromuscular training  
Body blade, plyoball, rebounder, platform training, etc.  
Progress in duration and intensity  
DL to SL
- Progressive strengthening with light resistance  
Calf press, leg press, squats (progress in depth), hip abd/add, HS curls, etc.

### Follow up

- Supervised rehab: 1-2x per week
- PT re-eval: monthly
- Ortho re-eval: ~6 months post-op

### Discharge Goals

- Hop test and Y-balance limb symmetry  $> 90\%$
- Isokinetic testing limb symmetry  $> 85\%$
- Mitigate future injury risk

### Miscellaneous

- After 6 months post-op, Phase 3 exercises are continued and gradually increased in intensity and duration as tolerated
- Pass Service fitness test at 6-8 months
- Progress activities for return to sport/collision sports or aggressive military training (i.e. airborne school) based on the patient's functional performance and endurance. This time period will be directed by the Ortho Surgeon and the Physical Therapist. This may require between 6-9 months before cleared without restrictions.

