



# WAYPOINT

## ORTHOPAEDIC ASSOCIATES

### Meniscus Repair Rehabilitation Protocol

#### GENERAL GUIDELINES

- Use the cryotherapy cuff continuously for the first 72 hours, then as needed thereafter
  - Ensure that the cuff never contacts the skin directly
  - Apply to the knee after performing rehabilitation exercises for the first 6 weeks
  - If no cryotherapy cuff is provided, use a bag of ice for 20 minutes each hour while awake, separating the bag of ice from skin with a cloth or T-shirt.
- Remove the bandage 72 hours after surgery, but leave the white steri-strips on the skin if present.
- Apply fresh gauze pad with an ace bandage for the first week after surgery
- You may shower after your first postoperative visit with your surgeon.
- **DO NOT** submerge the knee under water for 4 weeks.
- You may put the foot down for balance with crutches for the first 6 weeks
- Schedule a follow-up appointment for 10-14 days after surgery.

**PHASE I:** Begins immediately postoperatively through 2 weeks postoperatively

#### **Goals:**

- Protect the knee from falls
- Control inflammation
- Maintain full extension, initiate early range of motion

#### **Weight-Bearing Status and Brace:**

- Touch-down weight-bearing for **6 weeks with 2 crutches**
- 0 – 1 week: Brace locked in full extension for ambulation and sleeping
- 1 – 6 weeks: Unlocked 0-90 deg for ambulation, lock in extension for sleeping for 2 weeks.

#### **Therapeutic Exercises (3 times per day):**

- Ankle pumps
- Knee extension/hamstring stretching with heel prop
- Sitting leg dangle to 90 degrees using unaffected leg for support
- Patellar mobilizations (Stretch in 4 directions: medial, lateral, proximal, distal)
- Quad isometrics (hold for 10 seconds, with 5 repetitions)
  - progress to straight-leg raises with the brace unlocked

**PHASE II:** Begins 2 weeks postoperatively to 6 weeks postoperatively

**Goals:**

- Protect the knee from falls
- Control inflammation
- Maintain full extension, progress flexion

**Weight-Bearing Status and Brace:**

- Touch-down weight-bearing for 6 weeks with 2 crutches
- Brace unlocked from 0 to 90 degrees for ambulation
- May remove brace at night

**Therapeutic Exercises (3 times per day):**

- All exercises from Phase I
- Prone hangs to promote knee extension
- Heel slides with assistance from unaffected leg
- 4-way hip for flexion, extension, abduction and adduction
- Short arc extensions in terminal knee extension (0-30 degrees)

**PHASE III:** 6 weeks postoperatively and to 12 weeks postoperatively

**Criteria for advancement to Phase III:**

- No signs of active inflammation
- Flexion to 90 degrees

**Goals:**

- Restore normal gait
- Maintain full extension, progress flexion

**Weight-Bearing Status:**

- Progress to weight-bearing as tolerated with 2 crutches
- Transition to 1 crutch after a week, and then discontinue crutches as tolerated
  - Continue the brace until able to ambulate well without assistive device

**Therapeutic Exercises:**

- All exercises from Phase I-II
- Stationary bike (no tension; begin with high seat & progress to lower seat for ROM)
- Wall slides from 0-45 degrees of knee flexion
- Treadmill walking with emphasis on normalization of gait pattern
- Step-up/Step-down beginning at 2", gradually progress height as tolerated

**PHASE IV:** 12 weeks postoperatively and extends through 24 weeks postoperatively

**Criteria for advancement to Phase IV:**

- Full range of motion and normal gait
- No difficulty with wall slide to 45 degrees

**Goals:**

- Improve strength and endurance in preparation for functional activities
- Initiate proprioceptive training while protecting the repair and patellofemoral joint

**Therapeutic Exercises:**

- All exercises from Phase I-III
- Progress to single leg wall slides and leg press to 90 degrees of flexion
- Elliptical trainer (transition to jogging when comfortable)
- Treadmill or track jogging, gradually increasing distance and speed
- Avoid uneven terrain or concrete surfaces such as sidewalks and streets
- Balance/Proprioceptive training (single leg stance, balance board)
- Plyometric training (see following page for guidelines)

**Plyometric training** (should be performed on dedicated soft, level surface with good traction).

16 weeks postop: Double limb hops (advance to 30 reps)

20 weeks postop: Add alternating single leg hop (advance to 15 reps each foot)

Add double limb forward, side, and back hops (advance to 10 reps each)  
(distance should be 6 to 12 inches)

24 weeks postop: Add single leg hop (advance to 10 reps)

Increase distance of double limb forward hop as tolerated, add triple hop

24-36 weeks postop: If appropriate for desired sports or activities,

Add double leg rotational hops (90 degree turn midair, advance to 5 reps)

Add double leg rotational hops (180 degree turn midair, advance to 5 reps)

**PHASE V:** Begins 6 months postoperatively

**Criteria for advancement to Phase III-V:**

- Surgeon clearance
- Symmetric thigh musculature and performance within 10% of uninvolved limb

**Goals:**

- Maximize strength, endurance, and proprioception
- Gradual return to sport

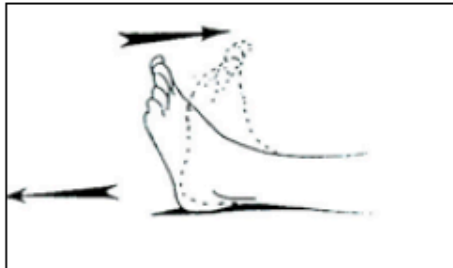
**Therapeutic Exercises:**

- All exercises from Phase IV
- May jog on any surface as tolerated, gradually increasing distance and speed
- Non-linear running (zig-zag run, backwards run, Carioca each side for 50 yards each)
  - Start with 'walk-through' at < 1% of maximum effort
  - Increase 10% effort each session as tolerated
- Agility drills added after non-linear running mastered (shuttle run, box drill, weaves)
  - Start with 'walk-through' at < 1% of maximum effort
  - Increase 10% effort each session as tolerated
- Sport specific training/practice once agility drills mastered
  - Start with 'walk-through' at < 1% of maximum effort
  - Increase 10% effort each session as tolerated

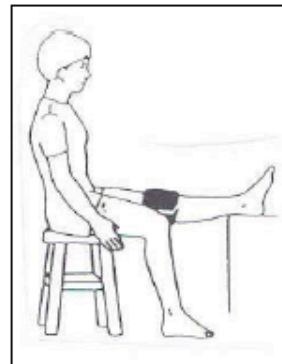
**General timeframe for typical return to sports**

Jogging:	14 weeks postoperatively
Golf:	5 months postoperatively
Roller blading:	6 months postoperatively
Skiing:	7 months postoperatively
Return to practice for all other sports:	7 months postoperatively
Full return to sports:	9 months postoperatively

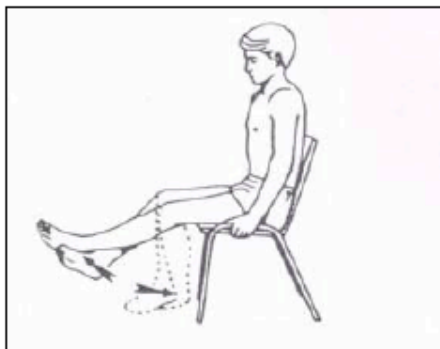
**Exercise Diagrams (Phase I)**



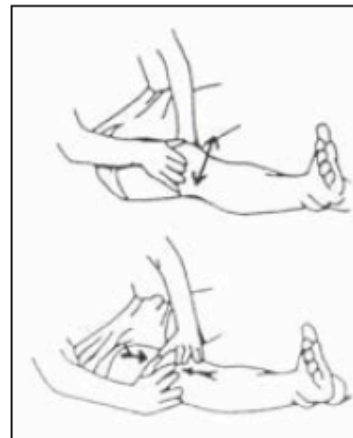
***Ankle Pumps***



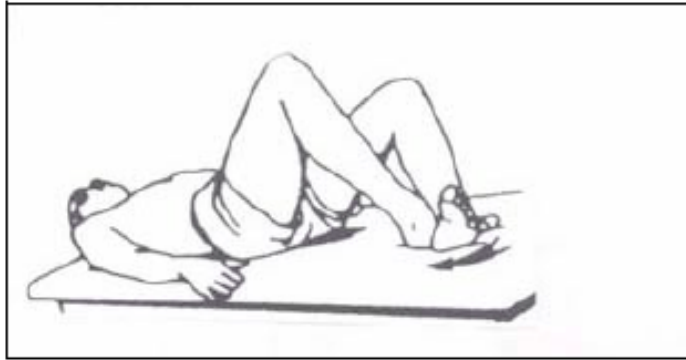
**Sitting extension/hamstring stretch with *heel prop*  
May also be performed recumbent (lying down)**



**Sitting leg dangle to 90 degrees  
using unaffected leg for support**

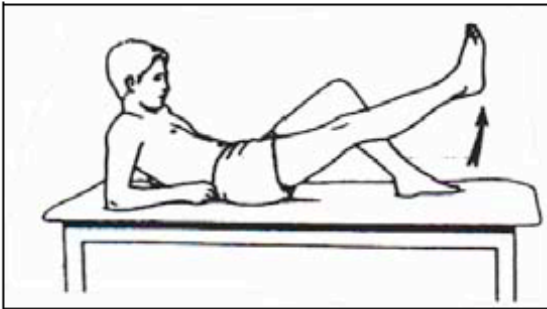


***Patella mobilizations*  
stretch in 4 directions (side to side, up and down)**

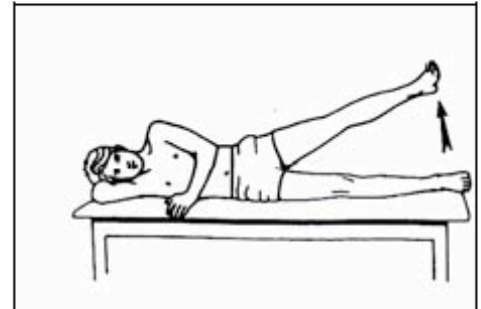


**Recumbent *heel slides* with assistance**

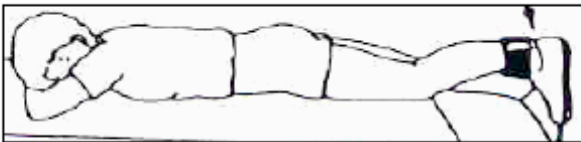
**Exercise Diagrams (Phase 2)**



***Straight-leg raises***



***Hip abduction (both legs)***



***Prone hangs* to promote full knee extension**