

University Orthopedics, Inc.
Sports Medicine Division

ISOLATED MENISCUS REPAIR POST-OP REHABILITATION PROTOCOL

The following is a protocol for postoperative patients following an isolated meniscus repair. The primary goal of this protocol is to protect the reconstruction while steadily progressing towards and ultimately achieving pre-injury level of activity. Please note this protocol is a guideline. Patients with additional surgery will progress at different rates. Achieving the criteria of each phase should be emphasized more than the approximate duration. If a patient should develop an increase in pain or swelling or decrease in motion at any time, activity should be decreased until problems are resolved.

PHASE I: 0-2 WEEKS POSTOPERATIVE

GOALS:

- Minimize effusion and pain
- Full passive extension
- Normal patellar mobility
- Knee flexion to 60 degrees
- Good quad control

DRESSING PROCEDURE:

- POD 1: De-bulk dressing, TED Hose in place
- POD 2: Change dressing, keep wound covered, continue TED Hose
- POD 7-10: Sutures out, D/C TED Hose when effusion resolved

AMBULATION AND BRACE USE:

Brace x 6 weeks: Locked in extension
Crutches – Partial weight bearing (PWB) in brace

EXERCISES:

Upper Body Ergometer for conditioning
No stationary biking
No active hamstring exercises
Patellar mobilization (teach patient)
Calf pumping
AAROM 0-90 degrees – Heel slides with towel assist
Passive extension with heel on bolster or prone hangs
Electrical stimulation in full extension with quad sets and SLR
Quad sets, Co-contractions quads / HS
SLR x 4 in brace (until demonstrates good quad control)
Core and hip strengthening
Double leg heel raises
Gentle Hamstring stretching
Ice pack with knee in full extension after exercise

PHASE II: ~2-4 WEEKS POSTOPERATIVE

GOALS:

- Pain/effusion control
- No extensor lag
- Improve local muscular endurance

AMBULATION AND BRACE USE:

Brace x 6 weeks – Locked in extension
Crutches – PWB in brace

EXERCISES:

No active hamstring exercises

Continue appropriate previous exercises
Scar massage when incision healed
PROM, AAROM AROM 0-90 degrees only
SLR x 4 (add light ankle weights if quad control)
Weight shifts (UE support)
Core and hip strengthening
Stretches – Hamstring, Hip Flexors, ITB, Gastroc-Soleus

PHASE III: ~4-6 WEEKS POSTOPERATIVE

GOALS:

- ROM 0-90 degrees
- No effusion
- Increase strength/balance

AMBULATION AND BRACE USE:

Brace x 6 weeks – Locked in extension
Crutches – PWB in brace

EXERCISES:

Continue appropriate previous exercises
PROM, AAROM, AROM 0-90 degrees only
Mini squats 0-45 degrees with UE support (table or suspension training system)
Passive flexion to 90 degrees (push up with opposite leg)

Leg press 0-45 degrees with light resistance (up to $\frac{1}{4}$ body weight)
Modified SLDL (cone touch exercise)
Core and hip strengthening exercises

Stationary bike with seat high for ROM – Complete cycle as able

AT THIS POINT, SOME PATIENTS MAY HAVE USED UP THEIR ALLOWABLE BENEFITS FROM THEIR INSURANCE COMPANY. HOWEVER, THIS DOES NOT MEAN THE PATIENT IS DONE WITH THEIR REHABILITATION. THE THERAPIST WILL WORK WITH THE PATIENT TO HELP SET UP A PROGRESSIVE HOME EXERCISE PROGRAM IF IT IS NECESSARY. IT IS RECOMMENDED THE PATIENT JOIN A HEALTH CLUB/GYM AT THIS POINT TO MAXIMIZE REHAB POTENTIAL.

PHASE IV: ~6-9 WEEKS POSTOPERATIVE

GOALS:

- Full ROM
- Normal gait
- Increase strength/balance

AMBULATION AND BRACE USE:

Brace – Open to available range; begin weaning
Crutches – Weight bearing as tolerated (WBAT), D/C when gait normal

EXERCISES:

Continue appropriate previous exercises
PROM, AAROM, AROM – Gradually increase motion through full range
Standing SLR x 4 with light resistance band bilaterally
Wall squats 0-45 degrees
Leg press 0-60 degrees with resistance no more than $\frac{1}{2}$ body weight
Hamstring curls 0-60 degrees – Carpet drags or rolling stool (closed chain)
Forward, lateral and retro step downs in parallel bars
– No knee flexion past 45 degrees (small step)
Single leg heel raises
Core and hip strengthening
Proprioceptive training – Single leg balance (eyes open/eyes closed); double leg forgiving surface
Treadmill – Forwards and backwards walking
Stationary bike – Progressive resistance and time
Elliptical trainer

PHASE V: ~9-12 WEEKS POSTOPERATIVE

GOAL:

- Walk 2 miles at 15 min/mile pace

AMBULATION: normal gait mechanics without assistive devices

EXERCISES:

Continue appropriate previous exercises with progressive resistance
Wall squats 0-90 degrees
Leg press 0-90 degrees with resistance as tolerated
Hamstring curls 0-90 on weight machine with light resistance
Forward, lateral and retro step downs (medium to large step)
Hip weight machine x 4 bilaterally
Proprioceptive training – Single leg balance (eyes open/eyes closed); Dynamic movement of UE and Les; single leg balance on forgiving surface
– Grid exercises
Fitter
Slide board
Treadmill – Walking progression program
Pool therapy

PHASE VI: 3+ MONTHS POSTOPERATIVE

GOAL:

- Run 2 miles at easy pace
- Return to all activities

EXERCISES:

No Squatting or Leg press > 90 degrees until beyond 4 months post-op
No hard cutting or pivoting on involved knee until 4-5 months post-op
No contact sports until 6 months post-op
Continue appropriate previous exercises
Core and hip strengthening
Hamstring curls on weight machine through full range

Short arc quads

Squatting exercises

Leg press exercises

Functional activities – Figure 8s, gentle loops, large zigzags with gradual progression towards sharper cuts

Stairmaster – Small steps

Treadmill – Running progression program

Pool therapy – Swimming laps

CRITERIA FOR RETURN TO SPORTS:

Gradual and progressive return to sports at **4 months** if all of the following criteria are met:

- Pain free running
- No more than 1+ knee effusion
- Isokinetic testing:
 - Quadriceps Peak Torque Deficit $\leq 10\%$
 - Total Work $\leq 10\%$
 - Pain free running
- All Functional Tests $\geq 90\%$ and pain free with good neuromuscular control:
 - Single Hip for distance
 - Triple Hop for distance
 - Triple crossover hop for distance
 - Timed 6 meter hop
 - Unilateral Vertical hop
 - Y Balance test for symmetry

This protocol is designed to be administered by a licensed physical therapist and/or certified athletic trainer. Please do not hesitate to contact our office should you have any questions concerning the rehabilitation process.