

Meniscus Repair

Precautions: WB status varies according to surgical technique. If it is not specified, check with physician.

Goals: Control inflammation/effusion, allow early healing, full passive extension, gradually increase knee flexion and independent quad control

Phase I (1 – 5 days post-op)

- Modalities: prn for pain and inflammation (ice/IFC)
- Brace/Gait:
 - Dr. Ferry: NWB or TTWB unless otherwise prescribed. Brace unlocked 0-90 degrees for 4 weeks
 - Dr. Whitehurst: NWB or TTWB unless otherwise prescribed. Brace locked in extension for 4 weeks
 - Dr. Trenhaile: WBAT. Brace locked in extension for 6 weeks during WB
- ROM: Do NOT force ROM
 - Week 2: 0-100 degrees
 - Week 3 0-110 degrees
 - Week 4: 0-120 degrees
- Patellar mobilizations
- Exercises:
 - Quad sets
 - Hamstring, gastroc, and soleus stretches- NWB
 - Hip abd/add isometrics
 - Avoid active knee flexion (due to semimembranosus insertion to posterior medial meniscus). ONLY passive heel slides

Phase II (5 days – 4 weeks post-op)

- Wound care: Monitor wound site and begin scar management techniques when incision is closed
- Modalities: prn
- Brace/Gait:
 - Dr. Ferry: NWB or TTWB unless otherwise prescribed. Brace unlocked 0-90 degrees for 4 weeks
 - Dr. Trenhaile: WBAT. Brace locked in extension for 6 weeks during WB
 - Dr. Whitehurst: TTWB brace locked in extension
- ROM: 0-90 degrees by 4 weeks. Do NOT force ROM

- Strengthening: Continue Phase I exercises
 - Active heel slides, progressing to prone knee flexion, or standing knee flexion without resistance (caution if posterior medial meniscus repair)
 - SLR x4 directions
 - SAQ including multi-angle quad sets
 - Ankle resistance with theraband
 - Dr. Trenhaile: Closed chain weight-shifting with brace locked in extension

Phase III (4 weeks – 10 weeks post-op)

- Brace/Gait:
 - Dr. Ferry
 - At 4 weeks post-op, progress to FWB with brace open 0-120 degrees
 - At 6 weeks, wean out of brace
 - Dr. Trenhaile
 - Until 6 weeks post-op, WBAT with brace locked in extension
 - At 6 weeks post-op, gradually wean from brace
 - Dr. Whitehurst
 - At 4 week post-op, may unlock brace 0-120*, 50% weightbearing
 - At 5 weeks post-op, 75% weightbearing
 - At 6 weeks, FWB and wean from brace
- ROM: At 4-6 weeks post-op, progress to 0-120 degrees. Do NOT force ROM
- Strengthening: Adhere to WB status (as listed above)
 - Cardiovascular exercise without resistance
 - Stationary cycle or seated recumbent stepper
 - May begin treadmill ambulation when patient is able to demonstrate normal gait pattern
 - Closed chain exercises: Limited knee ROM 0-60 degrees. Keep hip and knee in neutral position
 - Mini squats, wall sits, and leg press
 - Step ups
 - Partial lunges
 - Hip and Core strengthening, including 4 way hip with resistance
 - Uniplanar balance board
 - Proprioceptive training and single leg balance
 - TKE with theraband
 - Hydrotherapy

Phase IV (10+ weeks post-op)

- Precaution: Post-activity soreness should resolve within 24 hours
- Gait: Independent ambulation without brace or assistive device
- ROM: Full AROM
- Strengthening:
 - Closed chain exercises: Progress squats, lunges, and leg press 0-90 degrees
 - Heel raises
 - Progress core and hip strengthening/overall endurance training
 - Initiate “light” hamstring curls
 - Sport specific training and agility activities
 - Begin with low velocity, single plane activities and progress to higher velocity, multi-plane activities
 - Strength, balance, and control drills related to sport specific movements
 - Treadmill- begin running per physician
- Testing: <25% deficit for non-athlete and <20% deficit for athlete

Adapted From:

- 1) Wilk KE, Reinhold MM, Andrews JR. Meniscus Repair Rehabilitation (Complex Tears). Winchester, MA: Advanced Continuing Education Institute, 2019.
- 2) Consultation with Dr. Whitehurst, OrthoIllinois