Post-Operative Rehabilitation Protocol Following MENISCAL REPAIR

This protocol is to provide the therapist and patient with guidelines for the post-operative rehabilitation course following meniscal repair. Because the repaired meniscal tissue requires protection to allow healing, this protocol follows a conservative, restricted weight bearing and range of motion timeline. It should serve as a guideline based on the individual's physical exam/findings, progress to date, and the absence of post-operative complications. If the therapist requires assistance in the progression of a post-operative patient they should consult with the specific surgeon. Progression to the next phase is based on Clinical Criteria and/or Timeframes as appropriate.

Phase I – Immediate Post-Operative (Weeks 0-2):

Goals:

- Protect the meniscal repair
- Control pain, swelling, and inflammation
- Regain quadriceps activation/control
- Independent with brace, crutches, and home exercise program

Weight Bearing / Brace:

- Non-weight bearing (NWB) with crutches for 6 weeks total
- TROM (hinged range-of-motion) brace locked at 0° – no motion – for the first 2 weeks

Precautions:

- No weight bearing on operative leg
- No active or passive knee flexion beyond brace setting
- No pivoting, twisting, or squatting

Weeks 0-2:

- Cryotherapy for pain and swelling control
- Ankle pumps
- Quad sets
- Straight leg raises (SLR) in brace once quad set demonstrates good quality
- Patellar mobilization
- Hip strengthening (open chain, non-weight bearing) – abduction, adduction, extension as tolerated
- Edema control: elevation, compression, cryotherapy
- NWB gait training with crutches, TROM brace locked at 0°

Phase II – Protected Motion (Weeks 2-6):

Goals:

- Gradually and safely progress knee ROM per protocol timeline
- Maintain NWB status to protect the repair
- Maintain quadriceps activation and prevent atrophy
- Continue to control pain and swelling

Precautions:

- Remain NWB with crutches through week 6
- Do not exceed brace ROM settings below
- No pivoting, twisting, or squatting

Weeks 2-4: TROM 0-30°

- Advance TROM brace to allow motion from 0° to 30°
- Continue NWB with crutches
- Passive and active-assisted ROM within 0-30° range
- Continue quad sets, SLR, patellar mobilization
- Continue hip strengthening (open chain, non-weight bearing)
- Continue cryotherapy/edema control as needed

Weeks 4-6: TROM 0-60°

- Advance TROM brace to allow motion from 0° to 60°
- Continue NWB with crutches
- Passive and active-assisted ROM within 0-60° range
- Progress quadriceps and hip strengthening as tolerated within NWB restrictions
- Stationary bike with no resistance may be initiated if ROM allows and cleared by physician (non-weight bearing pedaling)
- Continue edema and pain control as needed

Phase III – Weight Bearing and ROM Progression (Week 6):

Goals:

- Discontinue NWB status and begin progressive weight bearing
- Achieve full TROM brace range of motion
- Begin standard motion and strengthening progression

Week 6:

- Unlock TROM brace to full ROM (0° – full flexion)
- Discontinue NWB – progress from NWB to weight bearing as tolerated (WBAT) per physician, weaning off crutches as strength and gait allow
- Begin standard ROM exercises to restore full active and passive knee flexion/extension
- Initiate closed kinetic chain strengthening: mini-squats, leg press (limited range), step-ups (low height)
- Continue quadriceps, hamstring, and hip strengthening program
- Stationary bike with light resistance once weight bearing allows
- Begin balance and proprioceptive training – double leg progressing to single leg stance

Phase IV – Standard Motion and Strengthening (Weeks 6+):

Goals:

- Full, pain-free ROM
- Restore quadriceps, hamstring, and hip strength to match uninvolved limb
- Normalize gait without assistive device
- Improve neuromuscular control and dynamic balance
- Progress toward functional and, as appropriate, sport-specific activity per physician clearance

Precautions:

- Avoid deep flexion loading (deep squatting/kneeling) until cleared by physician
- Avoid pivoting/cutting activities until adequate strength and physician clearance

Weeks 6-12:

- Progress closed kinetic chain strengthening through fuller range (squats, leg press, lunges) as tolerated
- Progress hamstring and hip strengthening in all planes
- Core and trunk stabilization exercises
- Continue proprioceptive training – unstable surfaces, single-leg balance progressions
- Elliptical trainer once ROM and strength allow
- Initiate straight-line walking/light jogging progression once criteria met (full ROM, minimal effusion, adequate quad strength, normal gait) and cleared by physician

Weeks 12+:

- Continue progressive strengthening – step-downs, single-leg squats, lateral step-ups
- Progress running program as tolerated
- Introduce agility and multi-planar activities gradually as strength and control allow, per physician clearance
- Progress toward sport-specific or functional activity based on individual goals and physician criteria

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.