

**Discharge Instructions**

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**Knee Meniscus Repair Post-Op Protocol**

This protocol is intended to be a general outline only. The physician reserves the right to either advance or delay this protocol as deemed necessary. If so, this should be done by direct communication with the therapist, or in writing on the therapy referral form given to the patient on the day of surgery.

**Guidelines for Pre-Op Physical Therapy**

* Patients may be required to attend one pre-op PT visit to receive gait training, issue crutches, review post-op exercises, and discuss post-op expectations.
* Patient should be instructed in edema control and post-op exercises (quad set, SLR, ankle pumps, etc.) and the importance of achieving full knee ext ASAP post-op.

**Guidelines for Post-Op Physical Therapy**

* Therapy beings on **Day One** post op in the outpatient clinic.
* Patient is typically seen 2x/week for 12-20 weeks post-operatively, tapering depending on patient status and ADL demands

**Meniscal Repair Precautions**

* No closed-chain knee flexion for first eight weeks.
* No resisted hamstring exercises (open or closed chain) for first three weeks.
* PROM restricted to 90 degrees for first 4-6 weeks (based on surgeon instruction)
* After above PROM restrictions are lifted, flexion ROM performed in supine or prone to tolerance is allowed.
* **Guidelines for Ambulation and Hinged Knee Brace**
* Bilateral axillary crutches to be used immediately post-op (patient should bring them to the surgical center) to maintain NWB status.
* Hinged knee brace will be issued at surgical center. Brace to be worn and locked in 0 degrees extension with all ADL’s for first 4 weeks (includes sleeping). Brace may removed for bathing and exercises.
* Maintain NWB with crutches and brace locked in extension for 4 weeks
* After 4 weeks, begin WBAT with brace locked in extension for an additional 2 weeks **unless otherwise instructed post-op.** After that, allow gait without brace or with hinge unlocked depending on tolerance.

**Guidelines for Wound Care**

* Surgical wounds should be covered with steri-strips, then with gauze and occlusive dressing. Change as needed and do not allow to become wet.
* Wrap knee in plastic wrap for showering until 3-5 days after stitches are removed (make sure wounds are fully healed).

**Day One**

* Review post-op exercises and edema control (ice/elevation): quad set, SLR, full knee ext (heel prop if necessary)
* Adjust hinged knee brace to leg for proper fit.
* PROM knee flex (goal = 90 degrees) and instruction in self-AAROM (any position)
* Initiate NMES for quad recruitment if patient has difficulty with quad setting.

**Week 1- Week 4**

* NWB’ing hip exercises: S/L hip abd, prone hip extension and abduction
* Ankle strengthening with elastic resistance (avoid torque on knee)
* Core strengthening (crunches, neutral spine stabilization)
* Use of Blood Flow Restriction and/or NMES for muscle re-education in NWB’ing
* Issue home NMES unit if needed for NWB’ing quad recruitment.

**Week 4 - 8**

**Goal:** Full functional strength, coordination, and unrestricted ROM of knee.

* At Week 4 (with MD approval), begin WBAT gait with knee locked in brace.
* At Week 6, initiate stationery bike for ROM. Unlock (or remove) brace for gait.
* Standing heel raises, weight shifting, SLS drills

**Week 8-16**

**Precaution: Squats and lunge instruction should emphasize no forward translation of the knee to avoid patellofemoral stress.**

* Patient may begin swimming (flutter kick) and elliptical machine.
* Initiate closed-chain knee flexion: step ups, squats
* Lateral lunges, progressing to forward lunges
* Step downs, progressive depth
* Balance drills, progress to unstable surfaces (tilt board, foam, etc.) and perturbations as tolerated
* Agility ladder drills (no plyo)
* Progress to advanced strengthening, such as leg press, single leg squats, RDL’s, etc.

**Week 16 to Discharge**

* Perform Phase IV-style exercises if appropriate: jogging starting at Week 16, then progress to running, cutting, and pivoting.
* Advance to progressive plyometric activity:
  + Lateral shuffles
  + Advanced ladder agility drills
  + Begin two-foot jumping (in place, then add distance, height and rotational components)
  + Progress to single leg hopping (in place, then add distance, height, and rotational components)
* Discharge when patient has achieved full ROM, is independent with ongoing HEP for strength/coordination, and has ability to perform all ADLs and work demands.

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