



Dr. Roger Chams 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. Email chamspa@ibji.com with any questions.

Guidelines for Pre-Op Physical Therapy

- Patients will receive instruction from Dr. Chams or one of his physician extenders on post-operative expectations, post-op Day One exercises, and use of crutches or another assistive device.
- Patient should be instructed in edema control and post-op exercises (quad set, SLR, and ankle pumps) and the importance of resting the knee in full extension position to avoid flexion contracture.

Guidelines for MD Follow Up Visits

- At two weeks post-op, patient will be seen by a physician extender for stitch removal and follow up.
- At six weeks post-op, patient will be seen by a physical extender in person or by telehealth. PT should send regular progress notes to Dr. Chams prior to scheduled follow up visits to report on strength, ROM, and functional status.

Guidelines for Post-Op Physical Therapy

- Therapy begins on Day One post op in the outpatient clinic.
- Patient is typically seen 2x/week for 12-24 weeks post-operatively, tapering frequency depending on patient status and ADL goals.

Meniscal Repair Rehab Precautions

- PROM Restrictions:
 - Standard repair: No ROM restriction unless stated on physician referral
 - Root repair: Restricted to 90 degrees for first 4-6 weeks (check physician referral for specific direction)
 - After above ROM restrictions are lifted, flexion PROM and AAROM performed in supine or prone to tolerance is allowed.
- No closed-chain knee flexion until Week 6; hold until Week 8 for root repair.
- No isolated hamstring resistance until Week 6 for standard repair; hold until Week 8 for root repair.

Guidelines for Ambulation and Use of Hinged Knee Brace

- Hinged knee brace (and crutches if needed) will be issued at surgical center. Brace to be worn and locked in 0 degrees extension with all ADL's, including sleeping.. Brace may be removed for bathing and exercises.
- Unless otherwise directed, patient will be TDWB (foot flat NWB'ing) with crutches for 4 weeks post op, with brace locked in extension for all activity.
- FOR STANDARD REPAIR: At 4 weeks post op, begin WBAT with brace locked in extension. Unlock when quad control is good and no lag with SLR, then removing brace over the next 2 weeks as tolerated.
- FOR ROOT REPAIR: TDWB for a total of 6 weeks with TROM brace locked in extension. Unlock when quad control is good and no lag with SLR, then removing brace over the next 2 weeks as tolerated.

Guidelines for Wound Care

- On Day One post-op in clinic, remove post-op cotton wraps.
- Original steri-strips should be left in place until stitch removal. Reinforce with more as needed.
- Cover steri-strips with gauze and occlusive dressing. Change as needed and do not allow to become wet.
- Wrap knee in plastic wrap ("Press 'n Seal") for showering until 3 days after stitches are removed (make sure wounds are fully healed before discontinuing).

Day One Post-Op (in clinic)

- Wound care as described above.
- Review post-op exercises and edema control (ice/elevation): quad set, SLR, full knee ext (heel prop if necessary). Review gait technique with crutches.
- Adjust hinged knee brace to leg for proper fit (adjustments will be necessary once post-op wraps are removed).
- PROM knee flexion (goal = 70-90 degrees) and instruction in self-AAROM.
- Initiate NMES for quad recruitment.

Phase	Goals	Restrictions	Exercise Examples
Weeks 1-4	Full knee ext, flexion to 90 degrees, SLR without lag. Reduce edema, facilitate quad control.	TDWB for gait & ADLs. Root repair: No knee flex >90 degrees. Brace locked in extension except for bathing and exercise.	SLR, s/l hip abd, prone hip ext, banded ankle strengthening, NWB'ing core strength. NMES for muscle reeducation as needed. Issue home NMES unit if quad recruitment is poor.

Weeks 4-6	Full functional strength, coordination, full ext ROM of knee, flexion to 120 degrees. For standard repair, begin WBAT in TROM brace locked at 0 degrees.	Standard repair: WBAT with brace locked, unlocking & weaning from brace when ready. No closed chain knee flexion. No resisted hamstring strengthening. Root repair: TDWB until Week 6. Unlock then remove brace once quad has good control in WB'ing.	Bloodflow restriction therapy. UBE, NWB'ing core strength. Standard repair only: Bike without resistance, standing weight shifts, heel raises, ski jumpers (soleus reach), small hurdle stepovers, calf stretch, SLS on stable surface, etc.
Weeks 6-8	Wean out of brace for gait if not already achieved. Walking gait without antalgia, single leg balance >10 seconds. Standard repair may initiate closed chain flexion from 0-60 degrees.	Standard repair only: Closed chain flexion exercises should be taught to avoid anterior translation of knee, ONLY from 0-60°. No loaded knee flexion (resisted hamstring work) beyond 45° degrees flexion) until week 8. No unstable surface weightbearing activity.	SLS progression on stable surfaces, standing TKE's, double leg RDL. Standard repair only: bike with light resistance, mini squats, small forward step up, 0-60 degree leg press, tilt board shifting, plank progressions.
Weeks 8-12	TROM discharged when ready. Full knee heel to buttock in prone. Normal stair usage. Root repair may begin closed chain flexion 0-60 degrees.	Standard repair: Closed chain progressive depth to 90 degrees knee flex as tolerated. Root repair: Closed chain progressive depth to 60 degrees. No plyo or high impact activity. Loaded flexion (resisted hamstring work) allowed from 0-90° flexion.	Bike, forward and lateral step up, step down, lateral sidestepping w/resistance, single leg RDL, 0-90 leg press, lunge matrix, slider drills, balance drills on unstable surfaces, non-plyo agility ladder, 0-90 degrees resisted knee flexion (hamstring resistance work)
Weeks 12-16	Single leg squat depth and control equal to uninvolved leg.	No plyo or high impact activity.	Begin flutter kick swimming. Progress depth of all closed chain work. Sled push/pull, reverse Nordic curls.
Week 16+	Discharge once patient has full strength, coordination and flexibility. Should meet return to play criteria Phase IV criteria (Y Balance and hop tests >90% of uninvolved leg, unrestricted agility and sport-specific drills). Patient should be	Focus on quality of motion, good lower kinetic chain alignment, confidence/control in deep closed chain positions within pain tolerance. Modify/slow progression if developing anterior knee pain.	Jog to run progression, progressive plyo activity, Blaze Pods, Nordic curls, jumping progressing to hopping (add distance/height/rotational components), perturbation training and dual tasking in high-level balance work.

	discharged with detailed HEP progressed appropriately for long-term independent training.		
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Updated 7/23/24 – TJB