



**Discharge Instructions
Dr Roger Chams**

Knee MCL Repair/Reconstruction 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.

Assistive Device Usage: Bilateral axillary crutches to be used immediately post-op, NWB (6 weeks) TTWB (6-8 weeks) FWBAT (8 week) unless otherwise specified.

TROM brace usage: To be refitted at 1st post-op visit. Patient will be fitted in the OR following procedure. It is to be worn with all ADL's and PT exercises for first 8 weeks, initially locked at 0 degrees extension. TROM remains on with sleeping and bathing.

Guidelines for Wound Care: Place occlusive dressing over steri-strips at wound sites at first visit. Change occlusive dressing every day, leaving steri-strips on unless they come off easily. Cover old steri-strips with new ones if needed. Keep wound sites covered with occlusive dressing until stitches are removed. After that, cover with standard adhesive bandages until wounds are fully healed (wrap knee in plastic wrap for showers).

Frequency of Physical Therapy Visits: Schedule physical therapy visits 3x/week for the first four weeks, then decrease to 2x/week as indicated for a total of ~6 months, tapering as appropriate.

Week 0-2

- **Therapy should begin on Day One Post Op.**
- Ankle pumps every hour
- Post -op brace to maintain full extension and prevent any valgus stress to knee.



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- Quad sets & SLR (Brace on) with no lag
- NWB with crutches, TROM locked in extension
- Ice packs or Cryocuff unit on knee for 20-30 minutes every hour, tapering to 3x/day as swelling decreases
- Passive ROM exercises: Limited to 0 - 30 degrees.
- **NO** Hip adductor strengthening

Week 3-4 (ROM 0-90 degrees, NWB)

- Supervised PT 2- 3 times a week (may need to adjust based on insurance)
- Continue SLR's in brace with foot straight up, quad isometric sets, ankle pumps
- No weight bearing with knee in flexed position, NWB with brace locked in full extension
- Patellar mobilization exercises
- Brace locked in full extension for ambulation and sleeping, and may unlock for sitting with limit of 0 - 90 degrees
- May **NOT** remove brace for HEP
- **NO** Hip adductor strengthening

Week 5 (ROM 0-125, TTWB)

- Continue with above exercises/ice treatments
- Advance ROM as tolerated with no limits with brace on
- Stationary bike for range of motion (short crank or high seat, no resistance) OK to remove brace for bike
- No weight bearing with knee in flexed position. Begin TTWB with brace locked in full extension
- Perform scar massage aggressively
- Progressive SLR program for quad strength with brace on - start with 1 lb, progress 1 -2 lbs per week
- Hamstring and hip PREs
- Seated knee extension (90 to 40 degrees) against gravity with no weight
- **NO** side lying Hip adductor strengthening

Week 6 (Advance TTWB), (advance to full motion)



- Continue all exercises
- No weight bearing with knee in flexed position, TTWB with brace locked in full extension. Advance to full weight bearing between 6 and 8 weeks post-op.
- AAROM seated knee flexion exercises
- AAROM (using non-surgical leg to assist) exercises (4-5x/ day) with brace on
- Continue ROM stretching and overpressure into extension
- SLR's - with brace on
- **NO** side lying hip adductor strengthening
- Leg press with 0-70 degrees knee arc of motion

Week 7 (WBAT)

- Continue above exercises
- Begin WBAT with brace on in full extension. D/C crutches when stable.
- Hamstring and calf stretches
- Self ROM 4-5x/day using other leg to provide ROM
- Advance ROM as tolerated - no limits, may remove brace for ROM
- Standard stationary bike if knee flexion is > 115 degrees
- Heel raises with brace on
- Hip strengthening but **NO** sidelying hip adduction

Week 8

- Continue above exercises
- Unlock brace for ambulation. Advance to D/C brace when quad control is sufficient.
- Mini squats (0-60 degrees)
- 4 inch step ups and progress as able
- Leg press (0 - 90 degrees)
- Forward lunges
- Lateral step out with elastic resistance
- Hip strengthening avoiding varus stresses

Week 9

- D/C brace if quad control adequate



- Advance AROM. Goal: 0 to 115 degrees, walking with no limp
- Add ball squats
- Initiate retro treadmill with 3% incline (for quad control)
- Initiate resistance on stationary bike
- Sport cord resisted walking
- 8 inch step ups
- 4 inch step downs and progress as able

Week 10-16

- Begin resistance for open chain knee extension
- Swimming allowed: flutter kick only
- Bike outdoors, level surfaces only
- Progress balance and board throws
- Plyometric leg press (for reduced impact vs FWB plyo)
- 6 to 8-inch step downs
- Ladder drills for agility (no plyo)

Week 16-24

- Begin plyometric training. Start double leg jumping, progress to single leg hopping, multi-directional hopping, cutting, and sport-specific drills.
- Progress to light running program including progressive home program when:
 - Patient can perform 8" step down with good control
 - Active knee ROM 0 to > 125 degrees
 - Functional single leg hop test > 70% contralateral side
 - Swelling < 1 cm at joint line
 - No pain
 - Walk without antalgia

4-6 Months

- Criteria for Return to Play (Phase IV Guidelines):
 - Full active and passive ROM of knee without pain
 - Quadricep control > 90% contralateral side



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- Satisfactory clinical exam
- Functional hop testing at least 90% of contralateral side
- Completion of a running program
- Safe and unrestricted sport-specific drill performance

Contact Sports: See Phase IV guidelines above. Prior to return to sport, patient should complete Phase IV Testing, such as Y BalanceTest, Biodex, Proprio Test, etc., showing complete closed-chain control and side-to-side symmetry. Begin non-competitive or competitive play at 6 months post-op, or once physician and therapist are satisfied with sport-specific functional drill performance.