Xinning Li, M.D.

Associate Professor Sports Medicine and Shoulder Surgery Boston University School of Medicine – Boston Medical Center Boston University Athletics – Team Physician 725 Albany Street – 4^a Floor Boston, MA 02118



(617) 638-5633 (Telephone – Shapiro Office) (617) 358-3400 (Telephone – Ryan Center) (617) 414-5226 (Fax) www.tigerortho.com



RIGHT or LEFT MCL RECONSTRUCTION W/ AUTOGRAFT OR ALLOGRAFT

Week 1-2 (Ankle pumps every hour)

- Post –op brace to maintain full extension.
- Quad sets & SLR (Brace on) with no lag
- TTWB with crutches
- Ice or Cryocuff Unit on knee for 20 30 minutes every hour
- Passive ROM exercises: Limits: 0 to 40 degrees.
- NO Hip adductor strengthening

Week 3-4 (ROM 0-75deg, TTWB)

- 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, TTWB 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 0-75deg.
- May not remove brace for HEP and NO Hip adductor strengthening

Week 5 (ROM as tolerated, 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 here
- No weight bearing with knee in flexed position, continue TTWB with brace locked in full extension
- Perform scar message 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 leg extension (90 to 40degrees) against gravity with no weight

• NO side lying Hip adductor strengthening

Week 6 (TTWB)

- Continue all exercises
- No weight bearing with knee in flexed position, TTWB with brace locked in full extension
- Flexion exercises seated AAROM
- AAROM (using good 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 0-70 arc of motion

Week 7 (WBAT)

- Continue above exercises
- Start WBAT with brace on in full extension and D/C crutches when stable
- Hamstring and calf stretching
- Self ROM 4-5x/day using other leg to provide ROM
- Advance ROM as tolerated no limits, may remove brace for ROM
- Regular stationary bike if Flexion > 115
- Heel raises with brace on
- Hip strengthening No side lying hip adduction

Week 8

- Continue above exercises
- Unlock brace for ambulation when quad control adequate
- Mini squats (0-60 degrees)
- 4 inch step ups
- Isotonic leg press (0 90 degrees)
- Lateral step out with therabands
- Hip strengthening

Week 9

- D/C brace if quad control adequate Advance ROM, Goal: 0 to 115 degrees, walking with no limp
- Add ball squats
- Initiate retro treadmill with 3% incline (for quad control)
- Increase resistance on stationary bike
- Mini-squats and weight shifts
- Sportcord (bungee) walking
- 8 inch step ups
- 4 inch step downs

Week 10

- 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
- 6-8 inch step downs
- Start slide board
- Jump down's (double stance landing)
- Progress to light running program and light sport specific drills if:

Quad strength > 75% contralateral side Active ROM 0 to >125 degrees Functional hop test >70% contralateral side Swelling < 1cm at joint line No pain Demonstrates good control on step down

Week 11-22

- Stair master machine
- If full ROM, quad strength > 80% contralateral side, functional hop test >85% contralateral side, satisfactory clinical exam:

Progress to home program for running. Progress to hops, jumps, cuts and sports specific drills. Begin to wean from supervised therapy.

<u>4 – 5 months</u>

Criteria to return to sports
 Full Active ROM
 Quadriceps >90% contralateral side
 Satisfactory clinical exam
 Functional hop test > 90% contralateral side
 Completion of ACL running program

<u>One Year</u>

• Doctor visit

This is strictly an outline of most of the major exercises that we would like to incorporate into the MCL rehabilitation. Not all exercises need to be done. Two main goals are that appropriate progress is made on a weekly basis, and that communication exists between patient, therapist and doctor.

Signature:_____

Xinning Li, M.D. Associate Professor Boston University School of Medicine