



# Indiana University Health

IU Health Physicians Orthopedics & Sports Medicine

# MEDIAL COLLATERAL LIGAMENT (MCL) REPAIR / RECONSTRUCTION

# PHYSICAL THERAPY PROTOCOL

# Bryan M. Saltzman, M.D.

Chief, Division of Sports Medicine & Shoulder/Elbow Surgery
Indiana University Health Physicians
Assistant Professor of Orthopaedic Surgery, Indiana University
Sports Medicine, Cartilage Restoration, Shoulder/Elbow Surgery
IU Health Methodist Medical Plaza North (MSK) – 201 Pennsylvania Pkwy #100,
Carmel, IN 46280

IU Health Methodist Hospital – 1801 N Senate Ave, Indianapolis, IN 46202 317-944-9400

www.bryansaltzmanmd.com

Patient Name:	Date of Surgery:
Evaluate and Treat	Provide patient with home program
Frequency:	x/week xweeks



- Ankle pumps every hour
- Post -op brace to maintain full extension.
- o Quad sets & SLR (Brace on) with no lag
- NWB with crutches
- o 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 0-75 deg, NWB)

- Supervised PT 2- 3 times a week (may need to adjust based on insurance)
- o Continue SLR's in brace with foot straight up, quad isometric sets, ankle pumps
- o 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 0-75 deg.
- May not remove brace for HEP
- o NO Hip adductor strengthening

# Week 5 (ROM as tolerated, NWB)

- 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 NWB 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 40 degrees) against gravity with no weight
- NO side lying Hip adductor strengthening

### Week 6 (TTWB)

- Continue all exercises
- o 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
- o 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)
- o 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
- o Initiate retro treadmill with 3% incline (for guad control)
- Increase resistance on stationary bike
- Mini-squats and weight shifts
- Sport cord (bungee) walking
- 8 inch step ups
- 4 inch step downs

# Week 10

- Begin resistance for open chain knee extension
- Swimming allowed, flutter kick only
- o 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)
- o 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</li>
- No pain
- Demonstrates good control on step down

## Week 11-22

- Stairmaster machine
- o If full ROM, guad 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.

### 4-5 months

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

, , ,	have examined this patient and physical therapy is buldwould not benefit from social services.
	Date:
Bryan M. Saltzman, MD	