



**Physical Therapy Medial Patellofemoral Ligament Reconstruction
Post-Operative Therapy Plan**

Date of Surgery: _____

Surgeon: _____

Date of Injury: _____

WB Precautions: WBAT in brace

Brace: Locked in extension x 4 wks, unlocked 0-90 at 4 wks, 6 wks wean out of the brace

**Precautions: ROM limited from 0-120 in NWB position x 6 wks
Hold bike x 4 wks**

Next Follow Up with MD/PA: _____

Functional Strength Testing (Start week 8): For functional strength testing use the [Lower Quarter Y Balance Test](#). This test compares side to side reaching in 3 different directions and also compares the reaches to limb length. Passing the LQYBT is not expected until 3-4 months post op but can be safely used as an exercise to improve strength, proprioception, mobility and coordination starting at week 8. [Lower Quarter Y Balance Test Score Sheet](#).

Plyometric progression to include Running (Week 12 to Discharge)

- No running until double and single leg hopping are shown to be tolerated well and with good form
- Passes Running Readiness Scale
 - o *SL Squat to Box for 60 sec :50-70 degrees of knee flexion at the bottom of the squat*
 - 80% of reps compared to unaffected leg
 - o *SL Soleus (knee bent) Raise 60 sec @ 80 BPM using metronome*
 - 80% of reps compared to unaffected leg
 - o *SL Leg Press 10RM (80% of weight compared to unaffected leg)*
 - o *Side Plank 90 sec hold each side*

[Double leg hop cycle x 2 weeks](#)

[Single leg hop cycle x 2 weeks](#)

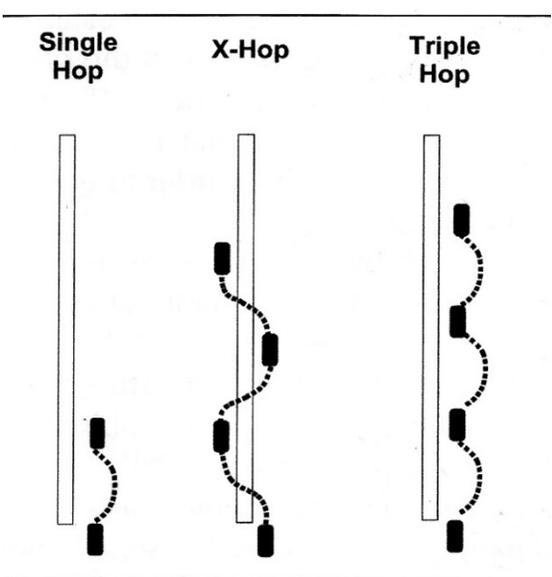
[Begin running progression](#)

[Teach jump prep \(countermovement drills\)](#)

Higher intensity plyometric exercises (incorporate practice of hop testing)

Implementation of sport specific multi-directional and reactive drills

Return to Play (RTP)/Discharge Time Lines and Criteria:



-Functional Testing – minimum of 4 months with physician approval (discharge potential if non-athlete)

- **Lower Quarter Y Balance Test:**
 - o \leq 4cm anterior reach
 - o $>$ 94% Composite Score
- **Hop Testing: \geq 95% Limb Symmetry Index**
 - o Single Hop for distance
 - o Triple Hop for distance
 - o Triple Crossover Hop for distance
 - o Square Hop test
 - o Medial and Lateral hop test for distance
- **[Closed Kinetic Chain Dorsiflexion](#)**
 - o $>$ 35 degrees bilaterally
 - o $<$ 5 degrees of asymmetry
- Peak Force Testing:**
 - o Quad strength 95%BW
 - o Quad:HS 3:2

-Return to Sport Testing for Athletes – minimum of 4 months with physician approval
Meet above standards in fatigued state. Recommend Borg scale rate of perceived exertion at 15.
Fatigue patient in movements similar to sports demands

Other functional testing can be included: tuck jump assessment, isokinetic testing, T-Test, single leg squat, etc.

Ideally patients should achieve the following milestones before advancing to the next stage.



Please print below chart and use check list as progress note for MD.

	Intervention	Milestones
Week 0-4	Ice/modalities to decrease pain and inflammation. Compression and elevation for swelling. Patellar mobilization (avoid lateral glide). NMES/BFR highly encouraged for quad activation with QS, SLR (in brace, 3-way, avoid adduction). Ankle pumps, glute sets, trunk stability exercises. WBAT with brace locked in extension.	<input type="checkbox"/> Full hyperextension <input type="checkbox"/> AROM/PROM= 0-120 as tol (non-weightbearing) <input type="checkbox"/> Active quadriceps contraction <input type="checkbox"/> No quad lag with SLR in full hyperextension (can DC brace with SLR when no lag)
Weeks 4-6	Open brace 0-90 deg at 4 wks if good quad control Begin bike, no resistance. Progress trunk stability exercises, add adduction to SLR (4-way), calf raises, SAQ, LAQ, standing TKE, mini-squats in brace. Hamstring and calf stretching as indicated.	<input type="checkbox"/> ROM: 0-120 <input type="checkbox"/> No quad lag with SLR in full hyperextension
Week 6-8	Aquatic therapy/walk/jog when wounds heal (start at chest level). Increase flexion ROM to full. Wean from brace if good quad control. Progress CKC exercises DL to SL when appropriate Proprioception exercises. Continue to progress trunk stability exercises.	<input type="checkbox"/> Continue to progress ROM to full <input type="checkbox"/> Restore normal gait
Week 8-12	Progress strengthening & proprioception in unilateral as tolerated. Continue to progress trunk stability exercises. Initiate DL/SL hop cycles when strength appropriate.	<input type="checkbox"/> Full painfree knee ROM <input type="checkbox"/> Bilateral squat without pain to 90 degrees <input type="checkbox"/> LQYBT initiated as exercise
Week 12-16	Continue unilateral strength and plyometric progression. Run progression can start if single and double leg hopping is tolerated and with safe form and passes running readiness scale. Implement low intensity sports specific drills. Initiate low speed cutting/agility drills.	<input type="checkbox"/> Pass LQYBT <input type="checkbox"/> CKC Dorsiflexion >35 and <5 deg asymmetry <input type="checkbox"/> Pass Running Readiness Scale
Week 16+	Higher level plyometrics, initiate more aggressive sport specific drills, evaluate form under fatigue. Progress appropriate gym strengthening program. Minimum timeframe for return to sport testing based on physician approval.	<input type="checkbox"/> Hop Testing LSI \geq 95% after fatigue protocol <input type="checkbox"/> Quad strength 95% BW <input type="checkbox"/> Quad:HS 3:2

When patient is discharged and returned to play, f/u with the surgeon to be scheduled. Prior to follow up, perform functional testing.
Can be scheduled with St. Luke's Rehab by calling 208-385-3720.

This therapy plan provides a synopsis of guidelines for recovering from sports-related surgery with St. Luke's Sports Medicine. It is provided as an educational resource. Individual circumstances vary and these plans cannot replace the advice of a medical professional.

Last Reviewed: 5/2022; Current to: 5/2022