

## **Knee LCL / Posterolateral Corner Repair-Reconstruction Rehab Protocol**

### **Multiple Knee Ligament Reconstruction Rehabilitation Protocol**

Curtis Bush, M.D.  
817-878-5300

Patient Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Surgery/DOS:** \_\_\_\_\_

Diagnosis: **ACL PCL LCL/Posterolateral corner MCL tear**

**ACL Graft type/Source: BTB / Hamstring / Quad / Achilles Autograft / Allograft**

**PCL Graft type/Source: BTB / Hamstring / Quad / Achilles Autograft / Allograft**

**LCL Graft type/Source: BTB / Hamstring / Quad / Achilles Autograft / Allograft**

**MCL Graft type/Source: BTB / Hamstring / Quad / Achilles Autograft / Allograft**

Frequency: 2-3 visits/week

Duration: 4-6 months

The intent of this protocol is to provide the therapist and patient with guidelines for the post-operative rehabilitation course after surgery. It is by no means intended to serve as a substitute for one's clinical decision making regarding the progression of a patient's post-operative course. It should serve as a guideline based on the individual's physical exam/findings, progress to date, and the absence of post-operative complications. If the therapist requires assistance in the progression of a post-operative patient they should consult with Dr. Bush.

**Progression to the next phase based on Clinical Criteria and/or Timeframes as appropriate.**

#### **Week 1 -2** (Brace locked in extension, TTWB in brace locked in extension)

- Ankle pumps every hour
- Post-op brace to maintain full extension.
- Quad sets
- TTWB with crutches/walker
- Ice or Cryocuff Unit on knee for 20-30 minutes every hour
- Passive ROM exercises: Limits: 0 to 90 degrees.
- No active knee flexion
- No hamstring workouts

#### **Week 3-6** (ROM 0-90 deg, TTWB)

- Supervised PT : 2- 3 times a week (may need to adjust based on insurance)
- SLR (Brace on) with no lag, with foot straight
- Quad isometric sets, ankle pumps, heel slides
- Patellar mobilization exercises
- Brace locked in full extension for ambulation and sleeping, and may unlock for sitting with limit 0-90 deg.

### **Week 7** (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
- Perform scar massage aggressively
- Progressive SLR program for quad strength with brace on - start with 1 lb, progress 1 -2 lbs per week
- Hamstring active knee flexion OK
- Seated leg extension (90 to 40 degrees) against gravity with no weight
- Hip adductor, flexor strengthening

### **Week 8** (TTWB)

- Continue all exercises
- 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
- Leg press 0-70 arc of motion

### **Week 9** (WBAT)

- Continue above exercises
- Start WBAT with brace on in full extension and D/C crutches when stable
- Unlock brace for ambulation when quad control adequate
- 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/core strengthening and proprioception training

### **Week 10**

- Continue above exercises
- Mini squats (0-60 degrees) and quad strengthening
- 4 inch step ups
- Isotonic leg press (0 - 90 degrees)
- Lateral step out with therabands
- Advance hip/core strengthening and proprioception training

### **Week 11**

- 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
  - Sport cord (bungee) walking
  - 8 inch step ups
  - 4 inch step downs

### **Week 12**

- 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 12-22**

- Stairmaster 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.

### **6-12 months**

- Criteria to return to sports and unrestricted activities Full Active ROM Quadriceps >90% contralateral side Satisfactory clinical exam Functional hop test > 90% contralateral side One Year