



## Xinning Li, M.D.



EXCEPTIONAL CARE. WITHOUT EXCEPTION.

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### **LEFT or RIGHT ARTHROSCOPIC ACL RECONSTRUCTION W/ MENICUS REPAIR** **PHYSICAL THERAPY PROTOCOL**

**Patient Name:**

**Date:**

#### **Pre-Op**

- Physical Therapy 2 weeks prior to surgery to insure full ROM, increase quad/hamstring strength, normalize gait
- Schedule a doctor visit for 10 - 14 days after surgery
- Schedule a PT visit for 14 days after surgery

#### **Week 1 Ankle pumps every hour**

- Post –op brace to maintain full extension. NWB with crutches.
- Quad sets & SLR (Brace on) with no lag
- 10% PWB with crutches
- Ice or Cryocuff Unit on knee for 20 – 30 minutes every hour
- Pillow or towel roll under heel passive knee extension exercise
- Passive ROM exercises only if done with therapist present (Brace off): Goal: 0 to 60 degrees.

#### **Week 2 (No knee flexion past 90 deg)**

- Supervised PT –2- 3 times a week (may need to adjust based on insurance)
- Continue SLR's in brace, quad isometric sets, ankle pumps
- No weight bearing with knee in flexed position, 10% WB with brace locked in full extension
- Passive knee extension with towel roll under heel
- Patellar mobilization exercises
- Brace locked in full extension for ambulation and sleeping, and may unlock for sitting. Continue to use crutches.
- May remove brace for HEP, except SLR
- Flexion exercises seated AAROM
- Hamstring and calf stretching
- Hip strengthening

### **Week 3 (no knee flexion past 90 deg)**

- Continue with above exercises/ice treatments
- No weight bearing with knee in flexed position, 10% with brace locked in full extension
- Perform scar message aggressively
- AAROM (using good leg to assist) exercises (4-5x/ day)
- Emphasis full passive extension
- Progressive SLR program for quad strength with brace off if no extensor lag (otherwise keep brace on and locked) – start with 1 lb, progress 1-2 lbs per week
- Theraband standing terminal knee extension
- Hamstring PREs

### **Week 4 (no knee flexion past 90 deg)**

- Continue all exercises
- No weight bearing with knee in flexed position, 10% with brace locked in full extension
- Continue ROM stretching and overpressure into extension
- Heel raises
- SLR's – in all planes with weight

### **Week 5**

- Continue above exercises
- PWB to WBAT in full extension pending progress
- Self ROM 4-5x/day using other leg to provide ROM, emphasis on maintaining 0 deg passive extension
- Advance ROM as tolerated – up to 115
- Isotonic leg press (0 – 90 degrees) if ROM allows
- Regular stationary bike if Flexion up to 115, use short crank or high seat if not
- Lateral step out with therabands

### **Week 6**

- Continue above exercises
- Can increase ROM as tolerated with no restrictions
- May unlock brace for ambulation if able to do SLR with no lag (with brace off)

### **Week 7-9**

- Advance ROM
- May D/C brace when walking with brace unlocked and no limp
- Retro treadmill progressive inclines
- Half squats (0-40 degrees)
- Add ball squats  
    Goal: 0 to 115 degrees, walking with no limp
- Brisk walking
- Stair master machine
- Increase resistance on stationary bike
- Sportcord (bungee) walking
- Start slide board
- 8 inch step ups

- Initiate retro treadmill with 3% incline (for quad control)
- 4-6 inch step downs

#### **Week 10**

- Begin resistance for open chain knee extension
- Progress balance and board throws
- Bike outdoors, level surfaces only
- Plyometric leg press
- Jump down's (double stance landing)

#### **Week 11-22**

- If full ROM, quad strength > 80% contralateral side, functional hop test >85% contralateral side, satisfactory clinical exam, and MD approval:  
     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 ACL running program

#### **One Year**

- Doctor visit

This is strictly an outline of most of the major exercises that we would like to incorporate into the ACL 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.

\* Please Send Progress Notes \*

**Signature:** \_\_\_\_\_

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