

## POST-OPERATIVE INSTRUCTIONS: ACL REHAB FOR THERAPISTS

### **Introduction**

Rehab instructions for patients with surgical reconstruction of ACL with or without partial meniscectomy or meniscal repair.

### **Summary of Goals**

Short term 1-2 weeks

1. Gain and maintain full extension (more important than flexion early on), then start flexion
2. Edema control
3. Lower extremity muscular control – Quad sets with hamstring co-contraction, hamstring sets, ankle pumps, SLR, hip abduction/adduction, knee AROM
4. Increase patellar mobility

Long term 4-6 months

1. Full AROM
2. Restore Quad / Hamstring strength ratio to 1:1
3. Restore strength deficits to 10% of uninvolved side
4. Return to previous level of function

### **Detailed Treatment Protocol**

#### **Week 1 (at home-also see post op instruction sheet)**

Brace on and in full extension at all times, including sleep and shower.

Weight bearing as tolerated with crutches but limit daily activity and elevate as much as possible

Quad sets, SLR, ankle and hip AROM at home

#### **Week 2 (start formal therapy)**

Maintain extension: prone leg hangs, towel extensions, and PROM if indicated.

Knee AROM (increase flexion while maintaining extension) patella mobilization, edema control

### **SUPERVISED EXERCISES (remove brace)**

1. Stationary bike – seat high, no resistance-for ROM
2. Active hamstring curls
3. Standing TKE with minimal resistance (approximately 20 degrees ROM)
4. Isokinetic: leg press slow speed, passive
5. Quad active extension sets no resistance
6. Hip PRE

Emphasize heel-to-toe gait, full weight-bearing with crutches, advance daily activity as tolerated.

Remove brace for shower and sleep if patient can SLR on own

Advance flexion lock to match ROM gains

Patient needs to spend a minimum, 1 hour daily with brace in full extension and pillow under heel.

### **Week 3**

Continue above

Emphasize FWB and wean from crutches

#### **Add to supervised exercises:**

1. Wall squats – limit flexion to 20 degrees
2. Prone knee extension
3. Isokinetic: Leg press progress from passive to light resistance
4. Retro ambulation on the treadmill emphasize heel to toe gait
5. SLR with weights

### **Week 4**

Continue above

FWB in brace no crutches

#### **Add to supervised exercises:**

1. Stationary bike: lower seat to match ROM, light resistance
2. Swimming program: don't push off wall with the operated leg
3. Isokinetic:
  - a. Leg press – increase resistance
  - b. Prone knee flexion – passive to light resistance
  - c. Sitting knee extension 30-90 degrees, standing TKE (D/C if patella-femoral symptoms occur) passive to progressive resistance

- d. Utilize isotonic, isometric, isokinetic modes
  - 4. BAPS board – progress PWB with rails to FWB
  - 5. Lateral step-ups (4 inches) when FWB
  - 6. Mini tramp-weight shift only
- May D/C brace when FWD, ROM >90 degrees and protective muscle control present – therapist’s discretion.

### **Week 5-8**

#### **Add to supervised exercises:**

- 1. Mini tramp bouncing
- 2. Balance / Proprioceptive training (with weights if tolerated)
- 3. Slow speed cariocas, walking side by side
- 4. BAPS board – FWB
  
- 5. Elliptical trainer
- 6. Isokinetic: TKE

Can play golf at 8 weeks without cleats

### **Week 9-12**

#### **Add to supervised exercises:**

- 1. Slide board
- 2. Mini tramp – jogging, plyometrics, progress to double leg jumping to 6-8 “ heights
- 3. BAPS board – FWB levels 3-5
- 4. Sports card – retro ambulation gradually increasing speed

Isokinetic eval at full ROM

### **Week 13-16**

#### **Add to supervised exercises:**

- 1. Mini tramp – plyometrics progress to single leg jump
- 2. Treadmill – start running program
- 3. Jumping for height and distance

If using brace fit now

### **Week 17**

- 1. Jump rope
- 2. Plyometrics – forward, backward, side to side

3. Treadmill – cariocas and side to side steps increase speed and inclination
4. Start sport specific rehab (cutting, pivoting, jumping) if isokinetic testing within 10% if uninjured side. Brace use is optional.

*Return to competitive cutting, pivoting sports at 24 weeks (6 months) postoperatively*