

## PCL/PLC RECONSTRUCTION REHABILITATION

**Revised OCTOBER 2015** 

# REHABILITATION PROGRAM PHASE 1: WEEKS 0-6:

**PHASE I GOALS:** Protect the surgical graft(s)

0-60° ROM

Regain adequate quadriceps control

**PRECAUTIONS:** \*\*Wear Brace at all times (even while sleeping)\*\*

\*\*NO knee hyperextension or AROM knee flexion exercises. NO

hamstrings strengthening\*\*

**CRUTCHES:** Touch Weight-Bearing (Foot flat: 0-10% body weight)

**BRACE:** Locked at 0° for 6 weeks with hand towel bolster lengthwise on posterior

leg below the knee. Alternatively use Jack PCL Brace.

**WOUND:** Post-op dressing remains intact until post-op day #1 (24 hours after

surgery) May begin showering after post-op day #2 (provide with occlusive dressings). May remove dressings after post-op day #3. If wound is dry may leave open and cover with compressive sleeve.

**DO NOT** submerge knee in tub or pool for 4 weeks\*

Compressive stockings until swelling resolves. Suture/staple removal at

10-14 days per guidance of surgeon.

**REHABILITATION:** Frequent use of cryocuff and/or ice with lower extremity elevated.

Begin patellar mobilizations (10 reps each direction TID). Begin scar massage after incision site sloughs/scar is formed.

Begin the first 3 exercises below and add others gradually as tolerated.

- 1. Calf pumping with tubing
- 2. Static quad sets (with estim until patient able to do 10 SLRs without extension lag)
- 3. PROM/AAROM exercise
  - Wks 1-2: 0-30°
  - Wks 3-4: 0-45°
  - Wks 5-6: 0-60°



- 4. Strengthening (add light weights when pain free)
  - Wks 1-4: Short arc quads (0-30°)
  - Wks 5-6: Medium arc quads (0-60°)
- 5. Gentle hamstring stretching
- 6. Supine passive extension to 0° extension
- 7. SLRs (with brace on): All directions (with exception of NO abduction or adduction for posterior lateral corner repairs)
  Ankle weights may be added to the SLR exercise gradually as tolerated
- 8. Seated bilateral calf raises progress to seated unilateral calf raises.
- 9. Seated ankle disk training
- 10. UBE and/or well leg cycle

**FOLLOW-UP:** Physical Therapy: Weekly

Orthopedics – 10-14 days, 6 weeks post-op

Supervised rehabilitation: 2-3 x per week as needed

**DOCUMENTATION:** Precautions, pain level, medications, modalities

Observation: (incision sites) – Signs/symptoms of infection? Site healing

well? Effusion?

Neurovascular status: distal pulses, motor and sensation intact? Presence

of calf pain?

Knee ROM and quadriceps function

## PHASE II: GENERALLY 7-12 WEEKS POST-OP

**PHASE II GOALS:** Normalizing gait pattern

Regain motion beyond 90 degrees

**PRECAUTIONS:** Continue to wear brace at all times

\* NO KNEE HYPEREXTENSION. NO OPEN KINETIC CHAIN

HAMSTRINGS STRENGTHENING\*

NO pool program or swimming

**CRUTCHES:** Progress gradually to full weight bearing during post op weeks 9 to 12

**BRACE:** Unlock brace for ambulation per the following schedule:

o Wks 7-8: 0-30°



o Wks 9-10: 0-60°

o Wks 11-12: 0-90°

#### **REHABILITATION:**

Progress to the following exercises and increase intensity gradually when patient is ready.

(i.e., no increase in knee pain or effusion since the previous exercise session.)

\*\*NOTE: All strengthening should be done with the brace on, using low weights

#### **WEEKS 7-8**

High repetitions, and in painless ROM

Active assisted weight shifts

Stationary bike for ROM – progress to biking for conditioning

Progressive AROM and ROM stretching exercises as tolerated

General LE stretching (calf, HS – add quads, HF, hip adductors @ approx.

9 weeks)

Calf press

Legg press

#### **WEEKS 9-10**

Double leg mini-squats (0-45°) – add weights gradually as tolerated

Bilateral calf raises – and unilateral calf raises @ 9 weeks

Step ups

Unilateral leg mini-squats (0-45°)

Gait training (cone walking, retrowalking, cariocas, shuffles, etc.)

## **WEEKS 11-12**

Progressive standing balance exercises (body blade, plyoball, platform

training, etc.)

Progress in duration, intensity, double leg to single leg, etc.)

Elliptical

**FOLLOW-UP:** PT: Bimonthly

Orthopedics: 12 weeks post-op

Supervised rehabilitation: 2-3 x per week as needed

#### **DOCUMENTATION:**

Precautions, pain level, medications, modalities

Effusion

Knee ROM and quadriceps function

Gait



## PHASE III: GENERALLY 4-6 MONTHS POST-OP AND BEYOND

PHASE III GOALS: Jog at own pace and distance without pain

80-90% quadriceps and HS strength return

Normalize ROM and gait function

**PRECAUTIONS:** NO PARTICIPATION IN SPORTS UNTIL AFTER 6 MONTHS

**BRACE:** Hinged knee sports brace (case by case)

#### **REHABILITATION:**

Continue phase II exercises as needed

Progress in duration and intensity of exercise only if there is no increase in

knee pain or effusion since the previous exercise session.

#### **WEEKS 13-16**

Aerobic conditioning (biking, elliptical, stair master)

LE weight lifting (Calf press, leg press, squats (0-60°), knee extension, hip

adduction/abduction)

Progressive pool program

### WEEKS 16-26 – and beyond

Progressive balance training

Active HS curls with ankle weights

Progress gradually using HS curl machine – using low weight,

high reps

Progressive jogging program (Begin jogging for 5-10 min TIW – increase

time and/or distance no more than 10-20% per week)

Straight line jogging (up to 50% speed on treadmill or other level terrain)

Progress functional training: Begin at 25-50% intensity and progress

gradually

(jumping, hopping, directional jogging, cariocas, shuffles, etc.)

**FOLLOW-UP:** PT: Monthly

Orthopedics: Approximately 6 months post-op

Supervised rehabilitation: 1 to 2 x per week as needed

#### **DOCUMENTATION:**

Pain level and medications

Effusion

Knee ROM and quadriceps function



Hop for distance at 6 months post-op Biodex testing at 6 months post-op (optional)

#### **MISCELLANEOUS:**

After six months post-op: Exercises in phase III are continued, gradually increased in intensity and duration as tolerated.

The recommendation is to wait until 9-12 months post-op to return to contact/collision sports.

This time period may be adjusted by the surgeon and therapists according to the complexity of the original injury and the patient progress.