

REHABILITATION FOLLOWING PCL RECONSTRUCTION

Post-Operative Physical Therapy Protocol

I. Immediate Post-Operative Phase (Week 1)

A. POD 1-3

Brace:

- Locked at zero degrees extension

Weightbearing:

- Two crutches as tolerated

Range of Motion:

- Patient out of brace 4-5 times daily to perform self ROM (0-90 degrees)
- No CPM used, generally

Exercises:

- Ankle pumps
- Quad sets
- SLR (3 way) Hip flexion, Abduction, Adduction
- ROM-Zero to 60 as tolerated
- Ice and Elevation: 20 minutes every hour and elevate with knee in extension

B. POD 4-7

Range of Motion:

- 0-75/80 degrees

Weightbearing:

- Two Crutches as tolerated

Exercises:

- Progress Strengthening Exercises

II. Maximum Protection Phase (Week 2-6)

Goals: Absolute control of external forces to protect graft
Nourish articular cartilage
Decrease Swelling
Decrease Fibrosis
Prevent Quad Atrophy

A. Week Two

Brace:

- Locked at zero degrees

Range of Motion:

- Patient out of brace 4-5 times daily to perform self ROM (0-90 degrees)

Weight Bearing:

- As tolerated 75% or greater

Exercises:

- Multi Angle isometrics 60,40,20 degrees
- Quad sets
- Knee extension 60-0 degrees
- Intermittent ROM 0-60 (4-5times)
- Patellar Mobilization
- Well Leg bicycle
- Proprioception Training squats (0-45 degrees)
- Leg Press (0-60 degrees)
- Continue Ice and elevation

B. Week Four

Brace:

- Locked at zero

Range of Motion:

- 0-105/110 degrees

Weightbearing:

- Full Weight Bearing- No crutches, one if necessary

Exercises

- Weight Shifts
- Mini Squats 0-45 degrees
- Intermittent ROM 0-90 degrees
- Knee extension 60-0 degrees
- Pool walking
- Initiate Bike for ROM and endurance

C. Week Five

- Initiate pool exercises – if available
- Fit for functional PCL brace if indicated

III. Controlled Ambulation Phase (Week 7-12)

Goals: Control forces during ambulation
Increased quad strength

A. Week Seven

Brace:

- Discontinue locked brace, brace opened 0-125 degrees

Exercises:

- Continue all exercises stated above
- Initiate swimming
- Initiate vigorous stretching program
- Increase closed kinetic chain rehabilitation

B. Week Twelve

Ambulation

- Discontinue brace, use brace for strenuous activity only

Exercises

- Begin Isokinetic 60 to 0 degrees ROM
- Continue Mini-Squats
- Initiate Lateral Step-ups
- Initiate Pool Running (forward only) – if available
- Initiate Hamstring Curls (0-60, Low weight)

- Bike for endurance (30 minutes)
- Begin walking program

IV. Light Activity Phase (3-4 months)

Goals: Development of strength, power and endurance
Begin to prepare for return to functional activities

Exercises:

- Begin light running program
- Continue Isokinetic (light speed, full ROM)
- Continue Eccentrics
- Continue Mini-Squats/Lateral Step Ups
- Continue closed kinetic rehabilitation
- Continue endurance exercises

V. Return to Activity (5-6months)

Goals: Achieve maximal strength and further enhance neuromuscular coordination and endurance

Exercises:

- Closed kinetic rehabilitation
- High speed isokinetics
- Running program
- Agility drills
- Balance drills
- Plyometrics initiated