

#### PCL Reconstuction Rehabilitation

#### Phase 1: Maximum Protection Phase (Weeks 1-4)

Goals: Control inflammation/effusion Allow early healing Full passive knee extension Gradually increase knee flexion Independent quad. Control

### Stage 1: Week 1

- Ice, compression, elevation
- Brace locked at 0 degrees for ambulation and sleeping only
  - o Brace may be unlocked during sitting etc.
- ROM (Passive 0-90)
- Patellar mobilization
- Strengthening exercise:
  - Ouad Sets
  - SLR flexion
  - Hip Abd/Adduction
  - Knee Extension 60-0 degrees
- Weight Bearing x 25% with crutches
- Avoid active knee flexion

## Stage 2: Weeks 2-5

- Continue use of ice and compression
- Brace locked for ambulation
- **ROM Guidelines** 
  - Gradually increase PROM
  - o Week 2: 0-90 degrees
  - o Week 3-4: 0-105 degrees
  - o Week 5: 0-125
- Strengthening Exercises:
  - o SLR (3 way: hip flexion, abduction and adduction
  - o Knee Extension 90-0degrees
  - Heel Slides to ROM as above
- Weight bearing guidelines-> Continue to lock brace
  - Week 3-4: 50-75% WB as tolerated with 1 crutches
  - Week 5: FWB unlock brace (Discontinue brace at 6 weeks)
  - \*Discontinue crutches when safe and proper gait (usually 6 weeks)

### Phase 2: Moderate Protection Phase (6-8 weeks)



Goals: Full PROM

No Swelling/inflammation Re-establish muscle control Proper gait pattern

- Continue use of ice and compression
- Continue ROM and stretching to maintain 0-135 Degrees
- Progress strengthening exercises Phase I
  - Heel slides to full ROM
  - Long sit hamstring stretch
  - o Knee extension 90-0 Degrees
  - o Standing hamstring curls
- Begin Level Two agility
  - o Cup walking
  - o Planks
  - o Bridging
  - O Steamboats 4 way (involved leg down)
  - o Ball roll: for, side and back (involved leg down)
  - Heel raises
- Phase II Light strengthening: Short range leg press, 4-Way hip, leg extension 90-45, Dead lifts
- Bicycle (as ROM permits)
- Pool Program

\*Avoid twisting, deep squatting, stooping, no lunges!!! pivoting, running and deep squatting

# **Phase 3: Controlled Activity Phase (9-16)**

Goals: Improve strength and endurance

Maintain Full ROM

Gradually increase applied stress

### Week 9

- Continue all strengthening exercises listed above
- Initiate Dynamic warm-up (no lunge)
- Initiate Form Stepping (progress from walk pace to fast step pace and no lunge)
- Initiate light resistive hamstring curls
- Toe calf raises
- Progress balance training
- Progress to isotonic strengthening program



#### Week 12 -week 15

- Continue Strengthening and stretching program
- Continue dynamic warm-up (now can include lunges)
- Form running: progress from fast pace walk to trot to jog pace (now include lunges)
- Initiate treadmill for endurance (3.5mph fast walk then progress to light jog at 14 weeks)
- Begin step ups and step downs
- Initiate pool running

### **Phase 4: Return to Activity Phase (4-6 month)**

**Goals:** Improve strength and endurance Prepare for unrestricted activities

#### Criteria to Progress to Phase 4

- Full non-painful ROM
- No pain or tenderness
- Satisfactory clinical exam

#### Exercises

- Continue and progress all strengthening exercises and stretching drills
- Initiate straight line running at 4 months
- Initiate controlled pivoting and cutting: 5 months
- Deep squatting permitted at 5 months
- Initiate controlled agility training: 5 months
- Initiate jumping program at 6 months: Ankle jumps, two-legged hop, two-legged jumps, single leg, etc...
- Gradually return to sport drills: 6 months
- Non contact practice 7 months
- Full competition non contact sports 9 months
- Full competition full contact 10 to 12 months