PCL Reconstruction 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  
  - Brace may be unlocked during sitting etc.  
- ROM (Passive 0-90)  
- Patellar mobilization  
- Strengthening exercise:  
  - Quad 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  
  - Week 2: 0-90 degrees  
  - Week 3-4: 0-105 degrees  
  - Week 5: 0-125  
- Strengthening Exercises:  
  - SLR (3 way: hip flexion, abduction and adduction  
  - Knee Extension 90-0 degrees  
  - 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  
  - Knee extension 90-0 Degrees  
  - Standing hamstring curls  
- Begin Level Two agility  
  - Cup walking  
  - Planks  
  - Bridging  
  - Steamboats 4 way (involved leg down)  
  - 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
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

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