POSTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

General Principles:
The PCL protocol will be used for patients who have had PCL reconstruction.

Note: Ligamentous stress testing should only be performed by the physician during the rehabilitation of PCL injuries.

PHASE I (Immediate Post-Operative) Weeks 0 - 2

Weight Bearing
1. Progress as tolerated up to 50% body weight.

Modalities
1. Ice and electrical stimulation.
2. Compression and elevation as needed to control pain and swelling.
3. Ice for 20 minutes following exercises throughout protocol.
4. Electrical muscle stimulation for quadriceps contraction during quad sets.
5. Moist heat and/or pulsed ultrasound after 48 hours.

Orthotics
1. Hinged PCL brace for exercises locked at 0 degrees of extension.
2. Compression wrap as needed to control swelling.

Exercises
1. Quadriceps sets.
2. Ankle pumps
3. Heel props, prone hangs.
4. Knee extension from 60 degrees to 0 degrees. No active knee flexion.
5. Straight leg raises:
   a. Three planes only: hip flexion, abduction, adduction.
   b. Increase resistance as tolerated.
6. Upper bike as tolerated for cardiovascular endurance.
7. No open chain hamstring work.

Phase II (Intermediate) Weeks 3 - 6

Weight Bearing
1. As tolerated, 50% or greater.

Modalities
1. Continue only as needed.

Orthotics
1. Locked at 0 degrees extension.
Exercises
1. Continue/progress previous exercises.
2. Stationary bike (no toe clips) as tolerated to increase ROM and cardiovascular endurance.
3. Leg Press or Plyosled – bilateral knee extension and toe raises to maximum knee flexion of 60 degrees.
4. Wall squats, ¼ squat, maximum knee flexion of 60 degrees.
5. Isometric quadriceps sets at 60, 40 and 20 degrees of flexion.
7. Calf raises.
8. Elliptical cross trainer or ARC trainer
9. Aquatics as needed

PHASE III (Advanced) Weeks 7 - 12
Modalities
1. Continue only as needed.

Orthotics
1. Hinged PCL brace for ADLs set at full ROM.

Exercises
1. Continue Phase II exercises.
   a. Advance resistance and duration as tolerated.
2. Open kinetic chain hamstring curls from 0 degrees to 60 degrees flexion.
   a. Advance resistance and duration as tolerated.
3. At Week 10:
   a. Progress open kinetic chain hamstring curls as tolerated.
4. At Week 12:
   a. Jump rope, bilateral progressing to unilateral.
   b. Plyosled bounding, bilateral progressing to unilateral.

PHASE IV (Return to Activity) Months 3 - 4
Modalities
1. As needed for pain and to control swelling.

Orthotics
1. Use functional brace for all activities.
2. If physician approves, may discontinue brace for ADLs.

Exercises
1. Isotonic hamstring curls, standing, prone, sitting
   a. Increase resistance as tolerated.
2. Proprioceptive exercises
3. Plyometrics.
4. Home exercise program.
5. Refer to fitness center.
6. Begin jogging and functional activities following physician approval.
7. Interval running program with physician approves.
8. Agility drills
9. Dismiss from program with physician approval.