

**NON-OPERATIVE PCL DEFICIENT KNEE
REHABILITATION PROGRAM**

I. Protection Phase - (Day 1 to Week 4)

Day 1 to 5

Brace ROM - 0-60 degrees

Weight Bearing - Two crutches as tolerated

Muscle Stimulation - Muscle stimulation to quads

Exercises

- * Quad sets
- * Straight leg raises (all 4 planes)
- * Knee extension (60 degrees to 0 degrees)
- * Multi-angle isometrics at 60, 40, 20 degrees (for quads)
- * Mini squats (0-50 degrees)
- * Leg Press (45-90 degrees)
- * *Avoid active knee flexion*

Day 5-7

Brace ROM – 0-90 degrees

Weight Bearing – Progress as tolerated

Exercises

- * Continue all strengthening exercises
- * Initiate wall squats (0-50 degrees)
- * Initiate proprioceptive training

Week 2-3

Brace ROM - 0-115 degrees

Weight Bearing - Without crutches week 3

Exercises

- * Progress exercises (listed above), using weight progression
- * Bicycle for ROM stimulus (week 2-4)
- * Pool program
- * Leg press (30-90 degrees)
- * Vertical squats (0-60 degrees)
- * Lateral step ups
- * Single leg squats

II. Moderate Protection Phase - (Week 3-6)

Week 3

Range of Motion - to tolerance (0-125 degrees)

Brace - Discontinue

Exercises

- * Continue all above exercises (progress weight)
- * Bicycle
- * Stairmaster
- * Rowing
- * Knee extension (90-0 degrees)
- * Mini squats (0-60 degrees)
- * Leg press (0-100 degrees)
- * Wall squats (0-75 degrees)
- * Step-ups
- * Hamstring curls (light resistance – 0-45 degrees)
- * Hip abd/adduction
- * Toe-Calf Raises
- * Proprioceptive training

Week 4-6

Brace - Fit for functional brace

Exercises

- * Continue all exercises listed above
- * Pool running
- * Agility drills

III. Minimal Protection Phase - (Week 7-12)

Exercises

- * Continue all strengthening exercises
- * Initiate Running Program
- * Gradual return to sport activities

Criteria To Return To Sport Activities

- * Isokinetic quad torque to body weight ratio
- * Isokinetic test 85% > of contralateral side
- * No change in laxity
- * No pain/tenderness or swelling
- * Satisfactory clinical exam