

# 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**