

## 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***

- 1) Isokinetic quad torque to body weight ratio
- 2) Isokinetic test 85% > of contralateral side
- 3) No change in laxity
- 4) No pain/tenderness or swelling
- 5) Satisfactory clinical exam