

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