

REHABILITATION FOR NONOPERATIVE PCL TEAR

I. PROTECTION PHASE (INJURY TO WEEK 4)

- Precautions:
- No squatting past 70 degrees for 8 weeks
 - No ACTIVE resisted hamstrings for 8 weeks
 - No ACTIVE knee flexion beyond 90 degrees for 8 weeks
 - No twisting motions for 4 months

- Goals
- Restore full passive knee extension
 - Diminish joint swelling and pain
 - Restore patellar mobility
 - Gradually improve knee flexion
 - Re-establish quadriceps control
 - Restore independent ambulation

DAY 1-5

AVOID ACTIVE KNEE FLEXION, AVOID KNEE HYPEREXTENSION

Brace set 0-60

Weight Bearing as tolerated, two crutches

Exercises

- * Quad sets
- * Mini squats (0-50 deg)
- * Knee extension (60 deg to 0 deg)
- * Straight leg raises (flexion, abduction, adduction)
- * Multi angle isometrics at 60, 40, 20 deg (for quads)
- * Leg press (45-90 deg)

Muscle Stimulation - Muscle stimulation to quads during quad sets

Ice and Evaluation - Ice 20 minutes out of every hour and elevate with knee in extension

DAY 5-7

Brace now 0-90 degrees

Weight Bearing - Two crutches, progress as tolerated

Range of Motion Patient out of brace 4-6 times daily to perform self ROM

Exercises

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

Muscle Stimulation - Electrical muscle stimulation to quads

Ice and Elevation - Ice 20 minutes out of every hour and elevate with knee in extension

WEEK 2-3

Brace 0-115 degrees

Weight Bearing as tolerated, without crutches by week 3

Range of Motion Patient out of brace or in PRS to perform ROM 4-6 times daily, goal knee flexion 90 deg by day 5, 100 deg day 7

Exercises

- * Progress exercises listed above with weight progression
- * Bicycle for ROM stimulus
- * Leg press (30-90 deg)
- * Vertical squats (0-60)
- * Lateral step ups
- * Single leg squats
- * Proprioceptive and balance activities

II. MODERATE PROTECTION PHASE (Week 3-6)

A: Week 3

ROM: to tolerance

Brace: Unlocked

Weight bearing: As tolerated

Exercises

- * Continue all above exercises (progress weight)
- * Bicycle
- * Stairmaster
- * Rowing
- * Knee extension 90-0 degrees
- * Mini squats (0-60 deg) and weight shifts
- * Leg press (0-100 deg)
- * Wall squats (0-75 deg)
- * Step-ups
- * Well leg exercises , hip abd/add

B: Week 4-6

Brace – Functional PCL brace.

Range of Motion Self ROM (4-5 times daily), emphasis on maintaining zero degrees passive extension

Full weight bearing No crutches

Exercises

Continue all above exercises, add agility drills

III. MINIMAL PROTECTION PHASE (Week 7-12)

Exercises

- * Initiate running program
- * Initiate Hamstring curls (start light resistance, 0-45 deg)
- * Gradual return to sport activities

Criteria to Return to sport

- * No change in laxity
- * No pain, tenderness, or swelling
- * Satisfactory clinical exam
- * Isokinetic test 85% of contralateral side