

## Non-Operative Rehabilitation Program for PCL-Deficient Knee

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Date of Surgery: \_\_\_\_\_

### PHASE 1 -PROTECTION PHASE (Day 1- Week 4)

- **Day 1-5**
  - Brace ROM: 0-70°
  - Weight-bearing: two crutches as tolerated
  - Muscle Stimulation: muscle stimulation to quads
  - Exercises
    - Quad sets
    - Straight leg raises (all 4 planes)
    - Knee extension (60° to 0°)
    - Multi-angle isometrics at 60°, 40°, 20° (for quads)
    - Mini squats (0-50°)
    - Leg press (45-90°)
- **Day 5-7**
  - Brace ROM: 0-90°
  - Weight-bearing: progress as tolerated
  - Exercises
    - Continue all strengthening exercises
    - Initiate wall squats
    - Initiate proprioception training
- **Weeks 2-3**
  - Brace ROM: 0-115°
  - Weight-bearing: one crutch then without at week 3
  - Exercises
    - Progress exercises (listed above), using weight progression
    - Bicycle for ROM stimulus (week 2-4)
    - Pool program
    - Leg press (30-90°)
    - Vertical squats (0-60°)
    - Lateral step-ups
    - Single leg squats

### PHASE II -MODERATE PROTECTION PHASE (Week 3-6)

- **Week 3**
  - Brace: discontinue
  - ROM: to tolerance (0-125°)
  - Exercises
    - Continue all above exercises (progress weight)
    - Bicycle
    - Stairmaster
    - Rowin
    - Knee extension (90-0°)
    - Mini squats (45-60°) (0-60°)
    - Wall squats (0-75°)
    - Step-ups



- Hamstring curls (light resistance) (0-45°)
- Hip abduction/adduction
- Toe-calf raises
- Proprioception training (biodex stability system)
- **Week 4-6**
  - Brace: fit for functional brace
  - Exercises
    - Continue all above exercises
    - Pool running
    - Agility drills



**PHASE III -MINIMAL PROTECTION PHASE**

- **Exercises**
  - Continue all strengthening exercises
  - Initiate running program
  - Gradual return to sport activities
- **Criteria to Return to Sport Activities**
  - Isokinetic quadriceps torque to body weight ration
  - Isokinetic test 85% > of contralateral side
  - No change in laxity
  - No pain/tenderness/swelling
  - Satisfactory clinical exam

**Comments:**

**Frequency:** \_\_\_\_\_ **times per week**

**Duration:** \_\_\_\_\_ **weeks**

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_