

### PHASE I - IMMEDIATE POSTSURGICAL PHASE (DAYS 1 - 14)

#### Goals

1. Maintain integrity of the repair
2. Diminish pain and inflammation/effusion
3. Prevent muscular inhibition
4. Full passive knee extension
5. Gradually increase knee flexion

#### Days 1 - 14

- Elevation
- Brace locked at 0 degrees for ambulation and sleeping
- Cryotherapy/ice for pain and inflammation - 15-20 minutes every hour
- PROM 0-45 degrees
- Patella mobilization
- Stretch hamstrings and calf
- Strengthening exercises
  1. Quad sets
  2. SLR flexion of hip
  3. Hip abduction/adduction
  4. Knee extension
- Foot Flat Weight Bearing (FFWB), weight of leg, with two crutches

### PHASE II - PROTECTION PHASE (WEEKS 2 - 4)

#### Goals As above

#### Precautions: AVOID TWISTING, DEEP SQUATTING, AND STOOPING

#### Weeks 2 - 4

- Continue cryotherapy/ice
- Continue brace locked for ambulation
- Strengthening exercises
  1. Multi-angle quad isometrics
  2. SLR in all 4 planes
  3. Knee extension 90-0

#### ROM Guidelines

- **Week 2: 0-45 degrees**
- **Week 3: 0-65 degrees**
- **Week 4: 0-90 degrees**
- **Week 5: 0-100 degrees**
- **Week 6: 0-110 degrees**
- **Week 7: 0-120 degrees**
- **Week 8: 0-135 degrees**

#### Weight Bearing Guidelines

- **Week 2: FFWB**
- **Week 3: FFWB**
- **Week 4: FFWB**
- **Week 5: 25% WB**
- **Week 6: 50% WB**
- **Week 7: 75% WB**
- **Week 8: 100% WB**

(Will discontinue crutches and brace by week 8)

## **PHASE III - MODERATE PROTECTION PHASE (WEEKS 5 - 8)**

### **Goals**

- 1. Full PROM**
- 2. No swelling/inflammation**
- 3. Re-establish muscle control**
- 4. Proper gait pattern**

**Precautions: AVOID TWISTING, PIVOTING, RUNNING, AND DEEP SQUATTING**

### **Weeks 5 - 8**

- Cryotherapy/ice as needed
- Continue ROM and stretching to maintain 0-135 degrees
- Strengthening exercises
  1. Leg press 70-0 degrees
  2. Knee extension 90-40 degrees
  3. Hip abduction/adduction
  4. Lateral step-ups
- Balance/Proprioception training

## **PHASE IV - CONTROLLED ACTIVITY PHASE (WEEKS 9 - 16)**

### **Goals**

- 1. Improve strength and endurance**
- 2. Maintain full ROM**
- 3. Gradually increase applied stress**

### **Weeks 9 - 16**

- Continue all strengthening exercises as above
- Initiate light-resisted hamstring curls
- Initiate stair stepper
- Toe calf raises
- Progress balance training
- Progress to isotonic strengthening program

## **PHASE V - RETURN TO ACTIVITY PHASE (WEEKS 24+)**

### **Goals**

- 1. Improve strength and endurance**
- 2. Prepare for unrestricted activities**

### **Criteria to progress to Phase V**

1. Full, pain-free ROM
2. No pain or tenderness
3. Satisfactory clinical exam
4. Satisfactory isokinetic test or other comparisons (need 85% strength of contralateral)

### **Exercises**

- Continue and progress all strengthening exercises and stretching drills
- Deep squatting permitted at 4 months
- Initiate straight line running at 4 months
- Initiate pivoting and cutting by 5 months
- Initiate agility training by 5 months
- Return to sports by 6 months