

## Rehabilitation Following ORIF Patella

### I. Immediate Postoperative Phase (Days 1-7)

**Goals:** Restore full passive knee extension  
Diminish pain and joint swelling  
Restore patellar mobility  
Initiate early controlled motion  
\*Controlled forces on repair site

#### Postoperative Days 1-4

- **Brace:** Drop locked brace locked at 0° extension with compression wrap  
Sleep in brace.
- **Weight bearing:** Toe touch WB with two crutches.
- **Range of motion:** Passive knee flexion 0-30°  
\* NO Active knee flexion
- **Exercises:** Ankle pumps  
Quad sets  
Patellar mobilization  
Hip abd/adductions  
EMS to quads during active contractions
- **Ice and elevation:** 20 minutes of each hour at elevate

#### Postoperative Day 4-7

- **Brace:** Continue use of brace (sleep in brace locked)
- **Weight bearing:** Locked brace two crutches, WBAT
- **Range of motion:** Passive knee flexion 0-45°  
\* NO Active knee flexion
- **Exercises:** Continue all listed exercises  
Initiate gravity eliminated SLR flexion (assisted)
- **Ice and elevation:** Continue ice and elevation

### II. Maximum Protection Phase (Weeks 2 to 6)

**Goals:** Control forces on healing tendon  
Gradually increase knee flexion  
Restore full passive knee extension  
Restore patellar mobility  
Retard muscular atrophy

#### Week 2:

- **Brace:** Continue use of locked brace (6 weeks)  
Sleep in brace (4 weeks)

- **Weight bearing:** WBAT (usually 50-75% BW)
- **Range of motion:** PROM knee flexion 0-45°
  - \* No active knee flexion
  - Full passive knee extension
  - Patellar mobilization
- **Exercises:** Electrical muscle stimulation to quads
  - Quad sets
  - Ankle pumps
  - Hip abd/adductions
  - Gravity eliminated SLR flexion
- **Ice and elevation:** Continue ice, elevation and compression

### Week 3:

- **Exercises:** Continue above mentioned exercises
- **Range of motion:** PROM: 0-60°-75°
- Continue use of two crutches – 75-80% BW with locked knee brace.

### Week 4:

- Continue all exercises listed above
- **Weight bearing:** Progress to one crutch (at 28 days)
- **PROM:** 0-75°-90°
  - \* NO Active knee flexion
- **Exercises:** Initiate mini-squats (0-45°)
  - Initiate weight shifts

### **Initiate proprioception drills**

### Weeks 5-6:

- Discontinue use of crutch at 5 weeks postop
- **Brace:** Unlock brace for ambulation at 6 weeks
- **Range of motion:** AROM, AAROM
  - Week 5: 0-90-100°
  - Week 6: 0-115°
- **Exercises:** Initiate pool exercise program
  - Active knee extension 90-30°
  - Multi-angle isometrics knee extension (submax)
  - Continue all exercises listed above

### **Initiate anti-gravity SLR flexion**

- Continue ice, compression and elevation as needed

### III. Moderate Protection Phase (Weeks 7-16)

**Goals:** Control forces during ambulation and ADL's  
Progress knee flexion ROM  
Improve lower extremity muscular strength  
Restore limb confidence and function

#### Weeks 7-10:

- **Brace:** Use postop brace unlocked for ambulation until 7-8 weeks (or until determined safe)  
Discontinue sleeping in brace
- **Range of motion:** Week 7: 0-115/120°  
Week 8: 0-125°  
Week 10: 0-125°
- **Exercises:** \*Gradually increase muscular strength  
Straight leg raises (flexion)  
Hip abd/adduction  
Knee extension 90-0  
½ squats  
Leg press  
Wall squats  
Front lunges  
Lateral lunges  
Calf raises  
Hamstring curls (restricted ROM) (Week 10-12) MD decision  
Proprioception drills  
Bicycle  
Pool program

Week 8: Initiate Active Knee Flexion (NO Isotonics)

#### Weeks 12-16:

- **Range of motion:** **Week 12:** 0-125°
- **Exercises:** \*Continue all exercises listed above  
Initiate lateral step-ups  
Initiate front step-downs  
Initiate backward lunges  
Walking program  
\*No sports!

### IV. Light Activity Phase (Months 4-6)

**Goals:** Enhancement of strength, endurance  
Initiate functional activities  
Improve tensile strength properties of tendon

- **Exercises:** Continue strengthening exercises  
Continue emphasis on eccentrics and functional exercises  
\*May initiate plyometrics (month 5)

- \*May initiate agility drills (lateral shuffle) month 5
- \*If appropriate!
- \*May initiate light running months 5-6

V. **Return to Sport Activity Phase (Months 7-9)**

**Criteria to Return to Activities:**

1. Satisfactory clinical exam
2. Satisfactory strength
3. Proprioception test 80% > of opposite leg
4. Appropriate rehab progression

**Goals:** Gradual return to full-unrestricted sports  
Continue strength program  
Continue functional/agility drills

**Exercises:** Continue strengthening exercises  
Continue agility program  
Continue sport specific training