

ORIF PATELLA Rehabilitation

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

- 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)
- 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
- Continue ice, elevation and compression

Week 3:

- Continue above mentioned exercises
- 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
- 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