



Rehabilitation Following Unilateral Patellar Tendon Repair

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

Brace

- Use postop brace as directed

Weightbearing

- Locked brace, two crutches
- Continue toe touch 25% weightbearing

Range of Motion

- 0-30°

Exercises

- Continue all listed exercises
- Initiate gravity eliminated SLR flexion (assisted)

Ice and elevation

- Ice 20 minutes of each hour, elevate

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 (4-6 weeks)
- Sleep in brace (4-6 weeks)

Weightbearing

- Weightbearing as tolerated (usually 25-50% BW)

Range of Motion

- PROM knee flexion only 0-45°
- 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

Exercises

- Continue above mentioned exercises

Range of Motion

- ROM 0-60°

Continue use of two crutches

- 75-80% BW

Week 4

Exercises

- Continue above mentioned exercises
- Initiate weight shifts



Weightbearing

- Progress to weightbearing as tolerated

Range of Motion

- PROM 0-60°

Initiate proprioception drills

Weeks 5-6

Discontinue use of crutch at 5 weeks postop

Unlock brace for ambulation at 6 weeks

Range of Motion

- PROM
- Week 5: 0-75°
- Week 6: 0-90°

Exercises

- Initiate pool exercise program
- Active knee extension 90-30°
- Multi-angle isometrics knee extension (subnex)
- Continue all exercises listed above

Initiate antigravity SLR flexion

Continue ice, compression, and elevation as needed

I. 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: 0-95/100°
- Week 8: 0-100/105°
- Week 10: 0-115°

Exercises

- * Gradually increase muscular strength
- Straight leg raises (flexion)
- Hip abd/adduction
- Knee extension 90-0°
- 1/2 squats
- Leg press
- Wall squats
- Front lunges
- Lateral lunges
- Calf raises
- Hamstring curls (restricted ROM)
- Proprioception drills
- Bicycle
- Pool program

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!



II. 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)
- *May initiate light running months 5-6
- *If appropriate!

III. RETURN TO SPORT ACTIVITY PHASE (Months 7-9)

Criteria to Return to Activities

- Satisfactory clinical exam
- Satisfactory strength
- Proprioception test 80% > of opposite leg
- 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