

REHABILITATION FOLLOWING 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

Postoperative Days 1-7

- Brace: Locked at 0° extension with compression wrap
Sleep in brace, ambulate in brace
- Weight bearing: Toe touch-50% WB AS TOLERATED with crutches,
brace in full extension
- Range of motion: 0-30°, ok for CPM as tolerated
- Exercises: Ankle pumps
Quad sets
Patellar mobilization
Hip abd/adductions
- Ice and elevation: max 20 minutes of each hour, elevate with 3 pillows
under foot and ankle, nothing under knee to encourage full extension

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 and sleeping in brace (6 weeks total)
- Weight bearing: WBAT (USUALLY AROUND 50% body weight
initially)
- 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 (assisted if needed)
- Continue ice, elevation and compression

Week 3:

- Continue above mentioned exercises
- ROM: 0-60°
- Continue use of two crutches – 75-80% BW

Week 4:

- Continue all exercises listed above
- Weight bearing: Progress to WBAT
- PROM: 0-75°
- Exercises: Initiate mini-squats (0-45°)
Initiate weight shifts
Initiate proprioception drills

Weeks 5-6:

- Discontinue use of crutch by 5 weeks postop
- Unlock brace for ambulation at 6 weeks
- Range of motion: PROM
Week 5: 0-80°
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 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: 0-95/100°
 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
 ½ 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!

IV. ***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

V. ***Return to Sport Activity Phase***

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