

POST-OPERATIVE REHABILITATION: KNEE TIBIAL TUBERCLE OSTEOTOMY

Therapy Plan: Twice per week for 0-2 months, once per week for 2-4 months

ROM Progression

Brace locked in extension initially while ambulating.

Passive knee motion for 0-6 weeks after surgery with gentle progression from 0-90 degrees.

Progress to full symmetric motion from 6-12 weeks after surgery.

Weight Bearing Progression

Initially 25% weight bearing 0-6 weeks after surgery

- Progress weight bearing over weeks 6-8 with the goal of removing crutches at 8 weeks
- Do NOT progress to one crutch - gait must be pain free and non-compensatory to remove both crutches
- Brace should remain in place for 6 weeks total

Initial Post-Operative Physical Therapy Visit

- Correctly perform 25% weight bearing ambulation with crutches/walker
- Instruct on quad sets, leg bridges, heel slides, and ankle pumps
- Isometric exercises for core

Phase 1 Physical Therapy (0-6 weeks): protect the joint, osteotomy healing

- NO open-chain exercises
- Manual therapy 20+ minutes per session, stationary bike 20-60 minutes/day (NO resistance)
- Soft tissue mobilization, patellar mobilization, isometric exercises, core strengthening
- Brace locked in extension for ambulation until full control, then may unlock

Phase 2 Physical Therapy (6-12 weeks): progressive strengthening

- Wean out of brace after 6 weeks
- Gradually progress weight bearing as above
- Tactile and verbal cueing to enable non-compensatory gait patterning
- Soft tissue mobilization, patellar mobilization, isometric exercises, core strengthening

Phase 3 Physical Therapy (12-24 weeks): return to pre-injury level and sport

- Focus on functional exercises in all planes, advance only when fully controlled
- Advance closed-chain and core strengthening
- Proprioceptive training
- Elliptical at 12 weeks, running at 16 weeks
- Full return may take 4-6 months or more