

Rehabilitation Protocol: Open Reduction Internal Fixation of Tibial Plateau

Phase I: 0-6 weeks

- Brace: hinge knee brace locked in extension when sleeping or mobilizing, otherwise unlocked 0-90
- ROM: 0-90 in brace x2 weeks, then progress ROM as tolerated, emphasis on extension
- Weightbearing: NWB
- Exercises:
 - Patellar mobility
 - Quad strengthening for full extension
 - Quad sets
 - SLR in brace at 0 deg, multi-plane
 - Heel slides in brace
 - Core strengthening
 - Upper body ergometer
 - Global lower extremity stretching program
 - Light stationary bike for motion with brace (no flexion beyond 90 deg on bike, no resistance)
 - Multi-plane ankle strengthening

Phase II: 6-12 weeks

- Brace: hinge knee brace, unlocked - discontinue when full weightbearing
- ROM: full
- Weightbearing:
 - > PWB in extension with crutches weeks 6-8
 - > Thereafter: Advance 25% weekly weightbearing and progress to full weightbearing
- Exercises:
 - Normalize gait mechanics
 - Advance stationary bike program
 - Initiate closed kinetic chain exercises
 - Isokinetic exercises
 - Core strengthening
 - No running or impact activity

Phase III: 12 weeks- 6 months

- Brace: none
- ROM: Full ROM including flexion and extension
- Weightbearing: full WBAT
- Exercises:
 - Normalize gait
 - Core strengthening
 - Progress balance exercises
 - Advance closed and open chain exercises
 - Progress strengthening: initiate gym strengthening beginning bilateral and progressing to unilateral

- After week 16:
 - Pool exercises for strengthening (pool running after week 16)
 - Begin functional cord program

Phase IV:
6-12 months

- Brace: None
- ROM: full, normal ROM
- Weightbearing: WBAT
- Exercises:
 - Implement sport specific, multidirectional drills
 - Begin bilateral plyometrics, progress to unilateral
 - Continue with aggressive lower extremity strength progression
 - Clearance from physician prior to return to sport