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ORTHOPAEDIC SURGERY | SPORTS MEDICINE

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

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- 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