

Rehabilitation Protocol: Tibial Plateau Fracture Repair

Phase 1 (Weeks 0-2)

- **Weightbearing:** Non-weightbearing with crutches/walker
- **Hinged Knee Brace:** Wear full-time (hinges set for motion 0-90°)
 - Locked in full extension on the day of surgery, then the hinge should remain unlocked
- **Range of Motion:**
 - Active and Active-Assist knee ROM. Emphasize maintaining knee extension.
 - Active/Passive ankle ROM.
- **Therapeutic Exercises**
 - Quad/Hamstring isometrics, heel slides, straight leg raises, co-contractions
 - Patellar Mobilizations

Phase 2 (Weeks 2-8)

- **Weightbearing:** Non-weightbearing with crutches/walker
- **Hinged Knee Brace:** Set hinges for unrestricted range of motion 0-130°
 - Worn for ambulation. Brace may be removed when at rest/sleeping.
- **Range of Motion:**
 - Active, Active-Assist, and gentle Passive knee ROM
 - Active/Passive ankle ROM
- **Therapeutic Exercises**
 - Continue Phase 1 exercises

Phase 3 (Weeks 8-10)

- **Weightbearing:** 50% Partial weightbearing with crutches/walker
- **Hinged Knee Brace:** Worn for ambulation only
- **Range of Motion:** Continue to work towards full knee ROM
- **Therapeutic Exercises**
 - May begin light-weight leg presses and low-resistance stationary bicycle
 - Okay to begin blood flow restriction therapy

Phase 4 (From Week 10)

- **Weightbearing:** Advance to weightbearing as tolerated. Wean from crutches/walker.
- **Hinged Knee Brace:** Wean from brace for ambulation
- **Range of Motion:** Maximize knee ROM
- **Therapeutic Exercises**
 - Begin elliptical trainer, treadmill, and high-resistance stationary bicycle
 - Gradual return to jogging/running
- Return to sports/athletics once cleared by Dr. Gross