

PHYSICAL THERAPY PROTOCOL

Tibial Plateau Fracture — Open Reduction & Internal Fixation

Plate/screw fixation of the tibial plateau

Internal fixation restores the joint surface of the proximal tibia. Because it is an articular fracture, weight bearing is protected for an extended period while early knee motion is emphasized to prevent stiffness.

General Precautions

- Non-weight-bearing or touch-down weight bearing with crutches for ~6-8 weeks (until radiographic healing) — follow surgeon-specific instructions.
- Hinged knee brace per surgeon.
- Early knee motion is encouraged; avoid loaded flexion early.
- No lifting/pivoting until cleared.

Phase I — Protected Motion Weeks 0-6

Goals

- Protect the fixation
- Restore knee motion (prevent stiffness)
- Restore quad control
- Control swelling

Precautions / Restrictions

- Non-/touch-down weight bearing
- Brace per surgeon
- No loaded flexion

Exercises & Interventions

- Passive/active-assisted knee range of motion (goal ~0-90° early)
- Quad sets and straight-leg raises
- Patellar mobilizations
- Ankle pumps
- Full passive extension

Criteria to Advance

- Full extension
- Flexion ~90°
- Good quad set

Phase II — Weight Bearing & Motion Weeks 6-12

Goals

- Progress weight bearing per healing
- Full range of motion
- Normalize gait

Precautions / Restrictions

- Advance weight bearing per surgeon (often begin ~6-8 weeks, full by ~12)

Exercises & Interventions

- Progressive weight bearing; wean crutches
- Full ROM
- Closed-chain strengthening in protected ranges
- Stationary bike
- Balance/proprioception

Criteria to Advance

- Full weight bearing without pain
- Full ROM
- Radiographic healing

Phase III — Strengthening Months 3-4

Goals

- Restore strength and normal gait

Exercises & Interventions

- Progressive resistive strengthening
- Single-leg strengthening and balance
- Low-impact conditioning

Criteria to Advance

- Strength $\geq 80\%$ opposite side
- Normal gait

Phase IV — Return to Activity Months 4-6

Goals

- Return to full activity

Exercises & Interventions

- Advanced strengthening
- Impact and sport-specific progression as cleared

Criteria to Advance

- Symmetric strength and function
- Surgeon clearance for full loading

This protocol is a general guideline. Progression is criteria-based and may be advanced or slowed by Dr. O'Donnell based on intraoperative findings, tissue quality, fixation, and individual healing. Time frames are approximate. Direct questions to the office at (305) 393-8810.