



# Tibial Plateau Fracture ORIF Rehabilitation Protocol

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**Procedure:** ORIF Tibial Plateau

**PT Frequency:** 2-4 times per week

**ROM Restrictions:** 0-90 (Passive, Active assist) x 6 weeks

**Brace:** Locked in full extension x 6 weeks

**Weightbearing:** NWB x 6 weeks, then PWB (25% with progression to full WBAT at 8 weeks)

## PHASE I (Weeks 0 – 6):

- **Weightbearing:** Non-Weightbearing (NWB) x 6 weeks with crutches and brace
- **Brace:** Worn at all times locked in full extension. Ok to remove for hygiene and exercises.
- **Range of Motion:** 0-90° with emphasis on full extension
- **Home Exercises:** Quad sets with brace locked at 0°, calf/ankle pumps
  - 2 weeks: Begin floor-based core, hip and glutes work and patellar mobilization and SLR, Progress non-weight bearing flexibility, modalities

## Phase II (Weeks 6 – 8)

- **Weightbearing:** Begin progression to partial weightbearing (25% then 50%) with goal of weightbearing as tolerated (WBAT) with crutches and brace by 8 weeks
  - Discontinue crutches when gait normalized and non-antalgic
  - Discontinue brace once fully WBAT without crutches
- **Brace:** Unlocked, off at night, for hygiene and exercises
  - Discontinue after 6-8 weeks when WB comfortably
- **Range of Motion:** Full unlimited active/passive ROM
- **Exercises:**
  - PROM/AAROM to tolerance, patella and tibiofibular joint mobs
  - Begin stationary bike as tolerated after 6 weeks
  - Advance closed chain quads, progress balance
  - Core/pelvic and stability work
  - Begin stationary bike at 6 weeks
  - Advance SLR, floor-based exercise; hip/core

## Phase III (Weeks 8 – 16)

- **Weightbearing:** Full WBAT
- **Hinged Knee Brace:** None
- **Range of Motion:** Full
- **Exercises:**
  - Progress closed chain activities
  - Progress flexibility/strengthening
  - Progression of functional balance, core, glutes program
  - Advance bike, add elliptical at 12 weeks as tolerated. Swimming okay at 12 weeks



## Phase IV (Weeks 16+)

- Exercises:** Advance Phase IV activity. Progress to functional training, including impact activity after 20 weeks when cleared by MD.

Exercise	Week																	
	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Initial Exercises:																		
ROM Goals	0-90°				0-125°			Progress to full										
Flexion/extension, heel slides/seated																		
Patella/Tendon mobilization																		
Quad Series	0° ISOs, SLR				60° ISO				70-30 arc-resisted			Full arc resisted						
Hamstring series/strength progression	ISOS, hip based				Knee-based resisted arc													
Sit and reach for hamstrings																		
Ankle Pumps																		
Crutch weaning	NWB						Begin WBAT progress to full by 8 weeks											
Heel prop knee extension stretch																		
SLR (w/ brace until quad control restored)																		
Toe and heel raises																		
Balance series																		
Weight-bearing Strength Exercises:																		
Double knee bends	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Leg Bridges (2 → 1 leg)	NWB																	
Begin cord exercises																		
Leg press (ISO → reps, 2 → 1 leg)																		
Reverse lunge- static hold																		
Dead Lift (2 → 1 leg)																		
Sports Test exercises																		
Cardiovascular Exercises:																		
Bike with both legs-no resistance	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Bike with both legs- resistance	NWB																	
Aqua jogging																		
Treadmill-walking (no limp)																		
Swimming with fins-light flutter kick																		
Elliptical Trainer																		
Stair stepper																		
*Cardio Exercises											Must tolerate daily walking with no limp & no significant increase in pain/swelling prior to initiating WB cardio (walk, elliptical, stepper)							
Agility Exercises:																		
Running Progression	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Initial-Single Plane	NWB																	
Advance-Multi Directional																		
Functional Sports Test																		
High Level Activities:																		
Golf Progression	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Outdoor biking, hiking, running	NWB																	
Return to Full Sport at 6-8 months post-op																		

Adapted from post-operative protocol by Dr. Jorge Chahla created by Howard Head Physical Therapy, Jill Monson, PT, OCS and Jon Schoenecker, PT, OCS, CSCS