

Rehabilitation Protocol: Distal Re-alignment (Tibial Tubercle Osteotomy)

	Weight Bearing	Brace Use	Range of Motion	Therapeutic Elements
PHASE I 0 - 2 weeks	Non-weight bearing (NWB) with crutches.	Lock in extension. CPM and exercises.	Advance as tolerated. Goal: at least 90° by 4wks, 120° by 6wks.	Quad sets, hamstring isometrics, co-contractions, ankle pumps. Regain full extension. Modalities: heat before, ice after. Quad stim. Start BFR.
2 - 6 weeks	Touch-down (TDWB) with crutches.	Brace progressively opened to 90°.	PROM: 90° flexion at each therapy session.	
6 - 8 weeks	50% WB x 1 week, then advance to FWB as tolerated, then wear crutches.	Discontinue brace if patient has controlled SLR without extension lag.	Progress to full ROM.	SLR. Begin progressive closed chain exercise. Bicycle. BFR.
8 - 10 weeks	Full weight (FWB) with normal gait.	None.	Full A/PROM.	Advance closed chain exercise. Balance exercises. BFR.
PHASE II 10 -16 weeks	FWB.	None.	Full A/PROM.	Begin open chain strengthening. Swimming and Treadmill walking for exercise. Progress to Elliptical (EFX).
PHASE III 4 - 5 months	FWB.	None.	Full.	Start progressive running program. Sports specific drills.
PHASE IV 5 - 6 months	FWB.	None.	Full.	Continue strength training. Consider return to high impact sports.