

High Tibial Osteotomy Protocol

	Phase I: weeks 0-2	Phase II: 3-6 weeks	Phase III: weeks 7-8
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> • TTWB only with crutches • Brace at all times <ul style="list-style-type: none"> ▸ Locked in full extension while ambulating and sleeping ▸ Unlocked 0-90° for PROM exercises 	<ul style="list-style-type: none"> • TTWB only with crutches • Brace <ul style="list-style-type: none"> ▸ May remove for sleep ▸ Unlocked 0-90° during daytime 	<ul style="list-style-type: none"> • Advance weight-bearing by 25% per week until WBAT • Gait training • May discontinue brace
Aerobic	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Begin stationary bike (low resistance, elevated seat height initially, lower height to usual position as ROM allows)
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> • PROM 0-90° (except as noted above while ambulating and sleeping) • Isometric quad sets • Patellar mobilization • Straight-leg raises (with brace) • Calf pumps 	<ul style="list-style-type: none"> • Continue Phase I exercises • Progress from PROM to AAROM to AROM as tolerated • Hamstring sets • Gluteal sets • Begin floor-based hip, pelvis, and core exercises 	<ul style="list-style-type: none"> • Continue Phase II exercises • Closed-chain exercises <ul style="list-style-type: none"> ▸ Quadriceps ▸ Wall sits ▸ Shuttle ▸ Mini squats ▸ Toe raises • Proprioceptive and balance training
Goals	<ul style="list-style-type: none"> • Pain control • Protect healing tissues • Minimize joint stiffness 	<ul style="list-style-type: none"> • Pain control • Protect healing tissues • Regain full ROM • Begin light muscle conditioning 	<ul style="list-style-type: none"> • Protect healing tissues • Gait normalization • Achieve full ROM if not attained already

	Phase IV: weeks 9-16	Phase V: months 16-24
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> • WBAT 	
Aerobic	<ul style="list-style-type: none"> • Progress stationing biking • At 12 weeks, may begin elliptical machine and swimming as tolerated 	<ul style="list-style-type: none"> • At 20 weeks, may begin walk-jog-run progression as tolerated
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> • Progress Phase III exercises as tolerated to improve flexibility, balance, and strength 	<ul style="list-style-type: none"> • Continue Phase IV exercises • Advance exercise as tolerated with focus on maximizing core, gluteal, quadriceps, and hamstring • At 20 weeks, may begin as tolerated: <ul style="list-style-type: none"> ▸ Impact / Jumping ▸ Plyometrics ▸ Dynamic loading ▸ Functional or sport-specific training
Goals	<ul style="list-style-type: none"> • WBAT • Progress flexibility, balance, and strength 	<ul style="list-style-type: none"> • Progress strengthening, aerobic exercise, and dynamic or sport-specific training as tolerated