

Tibial Spine Fracture Arthroscopic Fixation Protocol

	Phase I: Weeks 0-4	Phase II: Weeks 5-8	Phase III: Weeks 9-12
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> • Toe-touch weight bearing with brace locked in full extension • Brace locked in full extension while ambulating and sleeping but may be unlocked while sitting 	<ul style="list-style-type: none"> • Continue TTWB for 6 weeks after surgery and then gradually progress to WBAT • Unlock brace when minimal edema, no extension lag, and excellent quadriceps control 	<ul style="list-style-type: none"> • WBAT • Discontinue brace when quadriceps strength adequate for stable ambulation
Aerobic	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Stationary bike (low resistance, elevated seat height initially, and normalize height as ROM allows) 	<ul style="list-style-type: none"> • Advance stationary bike (increase resistance, normalize seat height as ROM allows)
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> • Isometric quad sets • Patellar mobility • Straight-leg raises with brace • Ankle pumps 	<ul style="list-style-type: none"> • Continue Phase I exercises • Begin PROM/AAROM/AROM progression • Weight shifts • Heel slides • Heel raises • Hip and core exercises • Proprioceptive and balance training 	<ul style="list-style-type: none"> • Continue Phase II exercises • Closed-chain exercises in sagittal and frontal planes (i.e. mini-squats, knee extension, no transverse plane exercises) • Begin leg press progression (body weight, two legs, single-leg, single-leg eccentric) • Begin step-up / step-down programs • Continue leg press progression (body weight, two legs, single-leg, single-leg eccentric) • Lunges (initially body weight only) • Aquatic therapy if incisions fully healed (flutter kicks only, no whip kicks)
Other	<ul style="list-style-type: none"> • Modalities as needed to reduce swelling and for muscle re-education • Home Exercise Program (HEP) per discretion of Physical Therapist 		
Goals	<ul style="list-style-type: none"> • Pain control • Protection of tissue healing 	<ul style="list-style-type: none"> • Continue protection of tissue healing • Begin ROM program • Proprioception and balance 	<ul style="list-style-type: none"> • Full ROM if not already achieved • Progress strengthening exercises • Work to passing Leg Press Test

	Phase IV: Months 3-5	Phase V: Months 5-6	Phase V: Months 6-9+
Weight-Bearing and Immobilization	<ul style="list-style-type: none"> • WBAT • Discontinue brace when quadriceps strength adequate for stable ambulation 	<ul style="list-style-type: none"> • Discontinue brace when quadriceps strength adequate for stable ambulation 	
Aerobic	<ul style="list-style-type: none"> • Begin walk-jog-run progression • Progress to forward straight-line running when adequate 8" step-down (no cutting, pivoting, or lateral movement) 	<ul style="list-style-type: none"> • Continue walk-jog-run progression 	
Range of Motion (ROM) and Strengthening	<ul style="list-style-type: none"> • Continue Phase III exercises • Advance closed-chain exercises • Progressive squat program • Progress with strengthening, motion, proprioception, and balance • At 4 months begin exercises involving low-speed cutting and pivoting motions 	<ul style="list-style-type: none"> • Continue Phase IV exercises • Begin general plyometric program • Begin general agility program 	<ul style="list-style-type: none"> • Advance to sport-specific plyometric program after completing general program and passing Leg-Press and Single-Hop Tests • Advance to sport-specific agility program after completing general program
Other	<ul style="list-style-type: none"> • Modalities as needed to reduce swelling and for muscle re-education • Home Exercise Program (HEP) per discretion of Physical Therapist 		
Goals	<ul style="list-style-type: none"> • Progress strengthening exercises • Begin more advanced exercise including jogging and more dynamic motions 	<ul style="list-style-type: none"> • Work to passing Leg-Press Test • Work to passing Single-Hop Test 	<ul style="list-style-type: none"> • Progress to sport-specific plyometric and agility programs • Return to sports 6-9 months after surgery