Rehab Protocol

L.L.I.

Tibial Tubercle Transfer



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Tibial Tubercle Transfer

Post-op recover	y First 2 weeks	Date
Goals	 Protect the knee and surgical incision 	
	 Recover from swelling and inflammation 	
	Control of post-surgical pain	
Precautions	 Non-weight bearing on crutches 	
	Brace locked in full extension	
Recommendations	 At rest the brace can be loosened to allow swelling 	
	and discomfort to settle	
	 Ice the knee up to 3 times a day – particularly in the 	
	first 72 hours	
	Sleep in the brace	
	 Range of motion exercises of ankle 	
	Range of motion exercises of hip	
Suggested	Static quads contraction	
exercises	Side leg raise	
	 Flexion, extension and abduction of hip - standing supported (non weight-bearing) 	
	 Supine knee extension – foot elevated/supported 	
	Ankle pumps	

Phase 1	Week 2 to week 6	
Goals	Achieve range of motion from 0-90 degrees	
Precautions	Touch weight bearing with crutches	
	No quads strengthening	
Brace	 Week 3 – week 4 Brace set at 0-90 degrees flexion 	
	 Week 5 – week 6 Brace unlocked 	
	Brace can come off for sleep after week 4	
	 At rest the brace can be loosened to allow swelling 	
	and discomfort to settle	
Recommendation	 Gradual increase in range of motion of knee – passive 	
	only, no strenthening	
	 Hip and gluteal muscle strengthening 	
	Ankle range of motion.	
Suggested	Static quads contraction	
exercises	Ankle pumps	
	 Supine bed supported knee bend 	
	Sitting supported knee bend	
	 Supine knee extension – foot elevated/supported 	
	 Sitting knee extension stretch – foot on floor 	
	 Side leg raise – knee straight, knee flexed 	

Phase 2	Week 7 to week 12
Goals	Comfortably walk normally



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	Gain full range of motion
Precautions	Brace can be removed
Recommendations	 Gradually begin taking weight through your leg when you walk. Fully weight bear as able Discard crutches when walking safely Avoid resisted strength training (lifting weights) with your quadriceps. Extending with the weight of your own leg is acceptable Hip and gluteal strengthening Ankle and calf strengthening Passively stretch knee to full extension and full flexion Short walks No running
Suggested exercises	 Supine straight leg raise Standing knee extension Sitting unsupported knee extension and flexion Single leg stance – knee straight, knee flexed Double calf raises Side leg raise – knee straight, knee flexed Gluteal band exercises Exercycle – low resistance, short interval

Phase 3	3 Months – 6 months	
Goals	Gain full function and strength	
Precautions	Avoid collision sports or high risk recreational activity	
	 Return to vigorous athletic activity as physiology 	
	allows (rapid return to rigorous strength training or	
	endurance and speed training can lead to	
	tendinopathies or injury)	
Recommendations	Concentrated full rehab program that includes	
	strengthening of core, hip flexors, gluteal muscles,	
	external rotators of the hip, quadriceps, hamstrings	
	and calves. Gain in confidence during athletic activity.	
	Neuromuscular control and co-ordination of leg	
	Long walks	
Cuggostod	Return to running in sensible progressive time frame	
Suggested exercises	Double leg squats (0-90)	
exercises	Single leg squats	
	Single leg hop	
	Step ups – increase height	
	Hop ups	
	Step downs	
	Resisted quads and hamstring weight training	
	 Side leg raise – knee straight, knee flexed 	
	Gluteal band exercises	



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•	Bridging with gluteal contraction	
٠	Double calf raises – progress to single calf raise	
•	Exercycle – increase resistance and training length	