



Rehab Protocol

High tibial osteotomy (HTO)

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Post-op recovery		First 2 weeks	Date
Goals	<ul style="list-style-type: none"> • Protect the knee and surgical incision • Recover from swelling and inflammation • Control of post-surgical pain 		
Precautions	<ul style="list-style-type: none"> • Non-weight bearing on crutches 		
Recommendations	<ul style="list-style-type: none"> • Ice the knee up to 3 times a day – particularly in the first 72 hours • Range of motion exercises of ankle • Range of motion exercises of hip • Increase flexion and extension of the knee as comfortable and as swelling allows 		
Suggested exercises	<ul style="list-style-type: none"> • Static quads contraction • Supine straight leg raise • Ankle pumps • Supine bed supported knee bend • Sitting supported knee bend • Sitting knee extension stretch – foot on floor • Supine knee extension – foot elevated/supported 		

Phase 1		Week 2 to week 6	
Goals	<ul style="list-style-type: none"> • Achieve range of motion from 0-90 degrees • Protect osteotomy site • Gain control of leg 		
Precautions	<ul style="list-style-type: none"> • Touch weight bearing with crutches 		
Recommendation	<ul style="list-style-type: none"> • Hip and gluteal muscle strengthening • Ankle range of motion. 		
Suggested exercises	<ul style="list-style-type: none"> • Static quads contraction • Supine straight leg raise • 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	<ul style="list-style-type: none"> • Comfortably walk normally • Gain full range of motion • Strengthen 		
Precautions	<ul style="list-style-type: none"> • No running • No deep squats, jumping or impaction activities 		
Recommendations	<ul style="list-style-type: none"> • Gradually begin taking weight through your leg when you walk. Fully weight bear as able 		

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	<ul style="list-style-type: none"> • Discard crutches when walking safely • Strengthen gluts, abductors, core • Ankle and calf strengthening • Passively stretch knee to full extension and full flexion • Knee strengthening exercises • Short walks 	
Suggested exercises	<ul style="list-style-type: none"> • Double leg squats (0-90) • Single leg squats • Single leg hop • Step ups – increase height • Hop ups • Step downs • Resisted quads and hamstring resistance training • Side leg raise – knee straight, knee flexed • Gluteal band exercises • Bridging with gluteal contraction • Double calf raises – progress to single calf raise • Exercycle – increase resistance and training length 	

Phase 3		3 Months – 6 months	
Goals	<ul style="list-style-type: none"> • Gain full function and strength 		
Precautions	<ul style="list-style-type: none"> • Avoid collision sports or high risk recreational activity • Return to vigorous activity as physiology allows (rapid return to rigorous strength training or endurance and speed training can lead to tendinopathies or injury) 		
Recommendations	<ul style="list-style-type: none"> • 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 		