

Quadriceps Tendon Reconstruction/Repair



Name: _____

Dr: Dr. Chris LaPrade

Date: _____

● = Do exercise for that week

Week

ROM RESTRICTIONS
 PROM ≤20° x 2 weeks, ≤45° until week 4, ≤70° until week 6, then gradually work toward full ROM

*Passive movement into knee extension x 4 weeks

BRACE SETTINGS

Immobilizer x 6 weeks

Weight Bearing status

NWB x 6 weeks

TIME LINES

Week 1(1-7POD)
 Week 2(8-14POD)
 Week 3(15-21POD)
 Week 4(22-28POD)

Initial Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Flexion/Extension heel slide series (passive return to extension)	●	●	●	●	●	●	●	●										
Flexion ROM progression	≤20° x 2 weeks, ≤45° until week 4, ≤70° until week 6, then gradually work toward full ROM																	
Heel prop knee extension	●	●	●	●	●	●	●	●										
Ankle Pumps	●	●	●	●	●	●	●	●										
Belt assisted calf stretch	●	●	●	●	●	●	●	●										
Seated hamstring stretch	●	●	●	●	●	●	●	●										
Quad ISO progression	In extension only (no NMES x 4 weeks)					@ 60° KF				All angles								
SLR progression (*NO extensor lag)	NO		Stand		Tall sit		Supine progressions											
Quad isotonic strength progressions	NO		TKE reps – seated/stand				60-0° arc			Full arc								
QUAD PRIORITIES	<ul style="list-style-type: none"> Manual proximal patellar glide with quad contraction Emphasize NO extensor lag (modify exercise position or intensity to assure NO lag) Gradual progressions into deeper KF angles (↑ tendon load) Maintain tissue stress ≤4/10 with exercise progressions 																	
Hamstring strength progressions	NO		ISOs			Gradually ↑ KF angle, ↑ load												
Multi-direction hip strength	Brace on					Progress as tolerated												
Bridging	NO			Knees extended over ball				Traditional bridge progression										
Cardiovascular Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Stationary bike	NO					ROM only			Slowly progress									
Swimming – light flutter kick	NWB							●	●	●	●	●	●	●				
Walking (no limp)									●	●	●	●	●	●				
Elliptical trainer										●	●	●	●	●				
Stair stepper											●	●	●	●				
Weight Bearing Strength	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Marching	NWB					●	●	●	●									
Single leg balance progressions							●	●	●	●								
Squat/leg press (gradually shallow→deep, 2→1 leg)						NO		≤45°, ISOs			Gradually ↑ depth, load							
Weight shift isometric hold over step								●	●	●	●	●	●	●	●	●	●	●
Step-up/down										2" TKE		Gradually ↑ height						
Hip hinging/dead lift						●	●	●	●	●	●	●	●	●	●	●	●	●
Testing	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Physical Performance (TRAC) Testing	Baseline testing @ 6 months, f/u test @ 12 months																	
High Level Activities	1	2	3	4	5	6	7	8	9	10	12	16	20	24				
Golf													●	●				
Outdoor biking, hiking, snowshoeing														●				

**** BFR encouraged (per any contraindications) / Delay NMES x 4 weeks****

PRECAUTIONS	NO quad activation into knee extension x 6 weeks, NO full arc quad x 12 weeks
ABBREVIATIONS	(ISO) Isometric, (KF) knee flexion, (LAQ) Long arc quad, (NWB) Non-weight bearing, (PRE) progressive resistance exercise, (SAQ) short arc quad, (SLR) straight leg raise, (SLS) single leg stance, (TKE) terminal knee extension