## **Quadriceps Tendon Reconstruction/Repair**



Nam	ne:		
Dr:	Dr. Chris LaPrade	Date:	

# ROM RESTICTIONS

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)

**PRECAUTIONS** 

**ABBREVIATIONS** 

Initial Exercises	Dr: Dr. Chris LaPrade					Da	te:									
Initial Exercises	●= Do exercise for that week	We	ek													
Flexion / Extension heel slide series (passive refurn to extension)				3	4	5	6	7	8	9	1		1 6		24	
Heel prop knee extension	•	•	•	•	•	•	•	•	•							
Heel prop knee extension																
Belt assisted calf stretch	Heel prop knee extension	•	•	•	•	•	•	•	•							
Seated hamstring stretch	Ankle Pumps	•	•	•	•	•	•	•	•							
Supplemental   Supp	Belt assisted calf stretch	•	•	•	•	•	•	•	•							
SLR progression (*NO extensor lag)	Seated hamstring stretch	•	•	•	•	•	•	•	•							
Auad isotonic strength progressions	Quad ISO progression	(						@ 609			)° KF All and			ıngle	S	
Manual proximal patellar glide with quad contraction   Emphasize NO extensor lag (modify exercise position or intensity to assure NO lag)   Gradually ↑ KF angles (↑ tendon load)   No   SO   No   No   No   No   No   No   No   N	SLR progression (*NO extensor lag)	N	10	Stand Tall si			l sit	sit Supine p					progressions			
Emphasize NO extensor large (modify exercise position or intensity to assure NO large)   Final Notation   Progress or intensity to assure NO large   Progress   Progress or intensity   Progress as tolerated	Quad isotonic strength progressions	Ν	10	eated/stand 60-0° arc Full arc												
Multi-direction hip strength   Bridging   No	QUAD PRIORITIES	<ul> <li>Emphasize NO extensor lag (modify exercise position or intensity to assure NO lag)</li> <li>Gradual progressions into deeper KF angles († tendon load)</li> </ul>														
Bridging	Hamstring strength progressions	Ν	NO ISOs													
Stationary bike   Stationar	Multi-direction hip strength		Br	ace	on		Progress as tolerated									
Stationary bike       NO       ROM only       Slowly progress         Swimming – light flutter kick       Walking (no limp)       Image: state of the progress of t	Bridging		NO		K				ed							
Swimming - light flutter kick   Walking (no limp)	Cardiovascular Exercises	1	2	3	4	5	6	7	8	9		1 2	1 6		24	
Walking (no limp)	Stationary bike	NO					ROM only Slo					owly progress				
Stair stepper   Step-up/depth   Single leg balance progressions   Squat/leg press (gradually shallow→deep, 2→1 leg)   Step-up/down   Step-up/	Swimming – light flutter kick								•	•	•	•	•	•	•	
Stair stepper	Walking (no limp)			NIA/D						•	•	•	•	•	•	
Weight Bearing Strength       1       2       3       4       5       6       7       8       9       1       1       2       2       24         Marching       Single leg balance progressions         Squat/leg press (gradually shallow→deep, 2→1 leg)       NO       ≤45°, ISOs       Gradually ↑ depth, load       Gradually ↑ depth, load       Gradually ↑ height       Easting       2" TKE       Gradually ↑ height       Gradually ↑ height       Gradually ↑ height       Easting       1       2       3       4       5       6       7       8       9       1       1       1       2       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       1       1       1       2       24         Golf       0 </td <td colspan="2"></td> <td colspan="3">NWB</td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td>			NWB							•	•	•	•	•		
Weight Bearing Strength       1       2       3       4       5       6       7       8       9       0       2       6       0       24         Marching       Single leg balance progressions       Squat/leg press (gradually shallow) deep, 2→1 leg)       NVD       ≤45°, ISOs       Gradually ↑ depth, load       Gradually ↑ depth, load         Weight shift isometric hold over step       Step-up/down       2" TKE       Gradually ↑ height       Gradually ↑ height         Hiph hinging/dead lift       1       2       3       4       5       6       7       8       9       1       1       1       2       2       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       1       1       1       2       2       4       4       5       6       7       8       9       1       1       1       2       6       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	Stair stepper											•	•	•	•	
Single leg balance progressions       Squat/leg press (gradually shallow→deep, 2→1 leg)       NO       ≤45°, ISOs       Gradually ↑ depth, load depth, load         Weight shift isometric hold over step       Image: Step-up/down       2" TKE       Gradually ↑ height         Hip hinging/dead lift       Image: Step-up/down       Image: Step-u	Weight Bearing Strength	1	2	3	4	5	6	7	8	9					24	
Squat/leg press (gradually shallow→deep, 2→1 leg)       NWB       NWB       Sdradually shallow deepth, load deepth,	Marching						•	•	•	•						
(gradually shallow→deep, 2→1 leg)       NWB       NWB       S45°, ISUS       depth, load         Weight shift isometric hold over step       Step-up/down       2" TKE       Gradually ↑ height         Hip hinging/dead lift       Image: step to the properties of the prope	Single leg balance progressions						•	•	•	•	•					
Weight shift isometric hold over step   Step-up/down   2" TKE   Gradually ↑ height   Hip hinging/dead lift   Testing   Baseline testing @ 6 months, f/u test @ 12 months   High Level Activities   1   2   3   4   5   6   7   8   9   1   1   1   2   6   0   24   Colf   Coutdoor biking, hiking, snowshoeing   Coutdoor biking, hiki		NWB														
Step-up/down         Hip hinging/dead lift         1       2       3       4       5       6       7       8       9       10       12       16       2       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       6       0       24         Golf       1       2       3       4       5       6       7       8       9       10       12       6       0       24         Golf       1       2       3       4       5       6       7       8       9       10       12       6       0       24         Golf       1       2       3       4       5       6       7       8       9       10       12       6       0       2       4       6       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <t< td=""><td></td><td></td><td></td><td></td><td colspan="5">depth, load</td></t<>										depth, load						
Hip hinging/dead lift  Testing  1 2 3 4 5 6 7 8 9 1 1 1 2 2 4 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 1 1 1 2 2 4 6 0 24  Golf  Outdoor biking, hiking, snowshoeing									2"	TVE		radi	ıally '	↑ boi	aht	
Testing         1         2         3         4         5         6         7         8         9         1         1         2         2         4           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         1         1         1         2         24           Golf         0												nadually   neignt				
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         1         1         1         2           Golf         0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>1</td><td>1</td><td>1</td><td>2</td><td></td></td<>								-			1	1	1	2		
High Level Activities       1       2       3       4       5       6       7       8       9       1 0 2 6 0 1 2 6 0 0 24         Golf       Image: Golf of the control of the con	-										0	2	6	0	24	
Golf         0 2 8 0           Outdoor biking, hiking, snowshoeing         0 0 0											24					
Outdoor biking, hiking, snowshoeing			_								0	2	6	0	24	
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NO quad activation into knee extension x 6 weeks, NO full arc quad x 12 weeks

(SLS) single leg stance, (TKE) terminal knee extension

(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,