

ACL Reconstruction, Lateral Meniscus Root Repair



Name: _____

Dr: Dr. Chris LaPrade

Date: _____

● = Do exercise for that week

Week

ROM RESTRICTIONS

0-90° x 2 weeks then progress as tolerated (*AAROM "hamstring light" knee flexion x 6 weeks)

BRACE SETTINGS

Immobilizer x 6 weeks then CTI brace

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					
Seated knee ROM foot slides - "Hamstring Light" x 6 weeks	0-90°		>90°-still HS light				AROM - progress to full gradually												
ROM Goals	≈90° by 2 weeks, ≈120° by 6 weeks, full ROM by 10 weeks																		
Ankle pumps	●	●	●	●	●	●													
Patella/Tendon mobilization	●	●	●	●	●	●	●	●											
Heel prop knee extension stretch	●	●	●	●	●	●	●	●											
Belt calf stretch, seated HS stretch	●	●	●	●	●	●	●	●											
Quad strength progressions	0° ISOs, SLR			60°ISO			70-30° arc - resisted			Full arc - resisted									
Hamstring strength progressions	No isolated, resisted HS (root)							ISOs, hip-based			Knee-based Resisted arc								
SLR hip ABD, ADD, Ext (brace on)			●	●	●	●	●	●	●	●									
Bridge in knee ext - calves over ball				●	●	●	●	●	●	●	●	●	●	●					
Cardiovascular Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24					
Stationary bike	NWB						ROM only	Progress intensity & duration gradually											
Treadmill walking (no limp)														●	●	●	●	●	●
Swimming – light flutter kick															●	●	●	●	●
Elliptical trainer, stair stepper																●	●	●	●
*NOTE FOR CARDIO	Must tolerate daily walking with no limp & no significant increase in pain/swelling prior to initiating WB cardio (walk, elliptical, stepper)																		
Weight Bearing Strength	1	2	3	4	5	6	7	8	9	10	12	16	20	24					
Crutch weaning – return to FWB	NWB						●	●											
Marching into brief SLS													●	●	●	●	●	●	●
SLS balance progressions														●	●	●	●	●	●
Squat/Leg Press (ISO→reps, 2→1 leg)															0-45°	0-70°	>70°	gradual	
Step-up/Lunge Progressions										ISOs	0-70°	>70°							
Dead lift (2→1 leg)									●	●	●	●	●	●					
Band resisted directional stepping											●	●	●	●					
Agility Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24					
Initial – single plane agility	NWB													●	●				
Advance – multi directional agility																			●
Return to run criteria	≥16 weeks post-op, YBT-Anterior ≤8 cm SSD, walk ≥1 mile no limp/no pain, Quad strength ≥70% LSI, ≥60% peak torque/BW																		
Sport Performance (TRAC) Test	Baseline test: 4 months, F/u tests: 7 & 10 months																		
High Level Activities	1	2	3	4	5	6	7	8	9	10	12	16	20	24					
Golf progression	NWB														●				
Outdoor biking, hiking, snowshoeing																			●
Return to sport progressions																			

****NMES & BFR encouraged (per any contraindications)****

PRECAUTIONS	NO resisted HS curls through arc of motion, cross-legged sitting, or squatting >70° x 4 months (root repair precautions)
ABBREVIATIONS	(HS) hamstring, (ISO) Isometric, (KF) knee flexion, (NWB) Non-weight bearing, (PRE) progressive resistance exercise, (SAQ) short arc quad, (SLR) straight leg raise, (SLS) single leg stance, (TKE) terminal knee extension

POST-KNEE SURGERY RETURN TO ACTIVITY GUIDELINES/CRITERIA

Return to run guidelines	≥16 weeks post-op, YBT-Anterior ≤8 cm SSD, walk ≥1 mile no limp/no pain, Quad strength ≥70% LSI, ≥60% peak torque/BW
Return to jump guidelines	≥20 weeks post-op, YBT(A) ≤4 cm SSD, Quad strength ≥80% LSI, ≥80% peak torque/BW, tolerate hopping/skipping drills with no increased soreness/swelling, tolerate lunge/squat/step single leg training progressions
Return to sport guidelines	In addition to TRAC testing goals (listed below), patient must achieve the following: >9 months post-op 16+ weeks progressive strength training 10+ weeks neuromotor training program 6+ weeks within-sport practice progression (per MD/PT team clearance) 3+ weeks graduated return to competition (per MD/PT team clearance)

POST-KNEE SURGERY “TRAC” PHYSICAL PERFORMANCE TESTING - TIMELINES & GOALS

(Will be performed at TCO/Training HAUS in Eagan, MN)

TRAC Test Activity	4 Month Goals	7 Month Goals	10 Month Goals
Knee Extension ROM	≤5° SSD	≤0° SSD	≤0° SSD
Knee Flexion ROM	≤10° SSD	≤5° SSD	≤0° SSD
YBT(A) Squat SSD	≤8 cm SSD	≤4 cm SSD	≤4 cm SSD
<i>Max YBT(A) squat depth relative to LL</i>	≥55% of LL	≥70% of LL	≥70% of LL
Repeated single leg squat (one leg rise test)	25 reps to 60° KF	25 reps to 90° KF	25 reps to 90° KF
2 leg squat symmetry (over force plates)	≤10% off-shift	≤5% off-shift	≤5% off-shift
Hip ABD strength LSI	≥80% LSI	≥90% LSI	≥90% LSI
<i>Hip ABD strength relative to BW</i>	≥20% of BW	≥25% of BW	≥30% of BW
Quad strength LSI	≥70% LSI	≥80% LSI	≥90% LSI
<i>Quad strength relative to BW</i>	≥70% of BW	≥80% of BW	≥90% of BW
Hamstring strength LSI		≥75% LSI	≥90% LSI
Single leg hop (SLH) test LSI		≥80% LSI	≥90% LSI
<i>SLH distance relative to LL (norm comparison)</i>		≥80% of norms	≥90% of norms
Triple hop test LSI		≥80% LSI	≥90% LSI
<i>Triple hop distance (norm comparison)</i>		≥80% of norms	≥90% of norms
2 leg jump (off shift at take-off/landing)		≤20% off shift	≤10% off shift
Peak knee flexion angle SSD with hop landing		≤20° SSD	≤10° SSD

Abbreviations for both tables above: (ABD) abduction, (BW) body weight, (ISO) isometric, (LL) leg length, (LSI) limb symmetry index, (norm) age & sex-matched normative data, (PRE) progressive resistance exercise, (ROM) range of motion, (SLR) straight leg raise, (SSD) side to side difference, (TRAC) testing to return to athletic competition, (UE) upper extremity, (YBT(A)) Y-balance test anterior reach