

ACL Reconstruction (BPTB Autograft), Lateral Meniscus Radial/Root Repair, LET (lateral extra-articular tenodesis), Medial Meniscus Ramp Repair

Name: _____

Dr: Dr. Chris LaPrade

Date: _____

● = Do exercise for that week

Week

ROM RESTRICTIONS

0-90° x 2 weeks
Then progress as tol
(*AAROM "hamstring light" knee flexion x 4 weeks)

Initial Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24
Seated foot slide knee flexion AAROM "HS light" x 4 weeks	<90°	>90° AAROM	AROM - progress to full gradually											
Heel prop knee extension stretch	●	●	●	●	●	●	●	●						
Ankle pumps + nerve glides	●	●	●	●	●	●	●	●						
Patella/Tendon mobilization	●	●	●	●	●	●	●	●						
Calf stretch with belt/strap	●	●	●	●	●	●	●	●						
Seated hamstring stretch	●	●	●	●	●	●	●	●						

BRACE SETTINGS

Immobilizer x 6 weeks

Quad strength progressions	0° ISOs, SLR			60°ISO			70-30° arc - resisted			Full arc - resisted				
Multi-direction hip strength	No varus stress/ABD						Progress multi-direction as tolerated							
Hamstring strength progressions	No isolated, resisted HS beyond AROM knee flexion							ISOs, hip-based			Knee-based Resisted arc			
Bridging	Knees in extension over ball							Classic bridge progressions						

Weight Bearing status

NWB x 6 weeks

Cardiovascular Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24					
Stationary Bike	NO						ROM only	Gradually progress intensity											
Swimming – light flutter kick	NWB								●	●	●	●	●	●	●				
Treadmill walking (no limp)									●	●	●	●	●	●	●	●	●	●	●
Elliptical trainer																●	●	●	●
Stair stepper																	●	●	●

TIME LINES

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

***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	NWB									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 guidelines	*See back page of protocol																	

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 recreation progressions																		●
Return to sport progressions																		

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

KEY PRECAUTIONS	No resisted hamstring curling through arc of motion x 4 months (meniscus) Limit squat depth to ≤70° x 4 months (meniscus), NO ER (cross-legged sitting) x 4 months (meniscus), Avoid aggressive twisting/pivoting x 6 months (ACL & meniscus)
ABBREVIATIONS	(ISO) isometric, (KF) knee flexion, (LAQ) long arc quad, (PRE) progressive resistance exercise, (SLR) straight leg raise, (TKE) band-resisted 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