

ACL Reconstruction (BPTB Autograft)



Name: _____

Dr: Dr. Chris LaPrade

Date: _____

● = Do exercise for that week

Week

ROM RESTRICTIONS

Full motion

BRACE SETTINGS

Immobilizer until SLR x 20 (no lag)

Weight Bearing status

WBAT

TIME LINES

Week 11-7POD)
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
Ankle Pumps & nerve glides	●	●	●	●	●	●	●	●						
Patella/Tendon mobilization	●	●	●	●	●	●	●	●						
Extension heel prop	●	●	●	●	●	●	●	●						
Seated calf & hamstring stretches	●	●	●	●	●	●	●	●						
Seated knee flexion ROM	Immediate AROM progression (various positions/strategies)													
ROM GOALS	Extension: Full, symmetrical (hyper)extension by 2 weeks Flexion: 2 weeks: 90°, 6 weeks: 120°, 10 weeks: full KF ROM													
Quad strength progressions	ISOs 0-60° SLR			90-60° arc PRE				Full arc PRE						
QUAD STRENGTH GOALS	20 SLR w/ no lag by 2 weeks 75% LSI by 16 weeks, 80% LSI by 24 weeks 90% LSI & >80% torque/BW by 36 weeks													
Hamstring strength progressions	ISOs			Progression of knee & hip-based PRE										
Multi-direction hip strength			●	●	●	●	●	●						
Bridge, Plank progressions					●	●	●	●	●	●	●	●	●	●
Cardiovascular Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24
Stationary Bike		●	●	●	●	●	●	●	●	●	●	●	●	●
Elliptical, Walking				●	●	●	●	●	●	●	●	●	●	●
Stair stepper, Rower					●	●	●	●	●	●	●	●	●	●
Swim – flutter kick						●	●	●	●	●	●	●	●	●
*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	●	●												
Calf raises in KE & KF		●	●	●	●	●	●	●	●	●	●	●	●	●
Marching into SLS		●	●	●	●									
SLS balance progressions			●	●	●	●	●	●	●	●	●	●	●	●
2 leg squat/Leg press (2→1 leg)			●	●	●	●	●	●	●	●	●	●	●	●
Shift & hold isometric over step			●	●	●	●	●	●	●	●	●	●	●	●
Lunge & step-up/down progressions				●	●	●	●	●	●	●	●	●	●	●
Band resisted directional stepping						●	●	●	●	●	●	●	●	●
Agility Exercises	1	2	3	4	5	6	7	8	9	10	12	16	20	24
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													
Initial – single plane agility/speed													●	●
Advance – multi directional agility													●	●
Sport Performance (TRAC) Test	Baseline test: 4 months, F/u test: 7 & 10 months													
High Level Activities	1	2	3	4	5	6	7	8	9	10	12	16	20	24
Golf														●
Outdoor biking, hiking, snowshoeing														●
Sport Re-entry progressions														●

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

Abbreviations	(ISO) isometric, (KE)knee extension, (KF) knee flexion, (PRE) progressive resistance exercise, (SLR) straight leg raise
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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

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 (60°)	25 reps (90°)	25 reps (90°)
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