

Matthew S. Butterfield, MD

ACL RECONSTRUCTION PT PROTOCOL

	BRACE INSTRUCTIONS	RANGE OF	PT
	AND RESTRICTIONS	MOTION GOALS	EXERCISES/NOTES
PHASE 1 First 2 Weeks (0-2) 1-2 Sessions/week Begin after 5-7 days	-Hinge Knee brace x 6 weeks (may remove at rest as desired) -Brace unlocked for full ROM, if ever locked should be at 0 degrees -May remove brace for sleeping at 2 weeks -Crutches as needed, wean off by 2 weeks -Weight bear as tolerated	-Begin PROM/ AAROM/AROM as tolerated (Minimum goal of 90 degrees knee flexion by 2 weeks)	-Begin patellar mobilization, pain/edema control, chair/wall squats, unilateral step up, single leg stance -Achieve full passive extension with bolster under heel or prone position leg off bed -SLR with brace in full extension until quad strength prevents extensor lag -Heel slides, quad/hamstring sets, gastroc/soleus stretches -Side lying hip/core strengthening
PHASE 2	-Hinge Knee brace x 6	-Continue to	-Continue phase 1
PHASE 2 Next 4 Weeks (2-6) 1-2 Sessions/week	-Hinge Knee brace x 6 weeks (may remove at rest as desired) -Brace unlocked for full ROM, if ever locked should be at 0 degrees -Weight bear as tolerated	-Continue to advance PROM/AAROM/ AROM to reach full ROM	-Continue phase 1 exercises -Supine/sitting heel slides, quad setting, straight leg lift, prone ankle hang, standing toe raise, hamstring curls, hip abduction, wall slides, front/side planks, advance hip/core -At week 5: Begin lunges, lunge walks, lunge squats with tibia perpendicular to floor, single leg squats

PHASE 3 Next 4 Weeks (6- 10) 2 Sessions/week	-Discontinue hinge knee brace -Full weight bearing	-Continue to advance PROM/AAROM/ AROM to reach full ROM	-Continue phase 2 exercises and add squat to chair, seated leg press, daily stretching including prone quadriceps, hamstrings, and calf -Begin use of conventional exercise equipment (start with light weight and high rep/sets, progress to short reps/sets and high weight) -Stationary bike to increase ROM -May begin elliptical or stair climber at 8 weeks
PHASE 4 Next 6 Weeks (10- 16) 1-2 Sessions/week		-Continue to advance PROM/AAROM/ AROM to reach full ROM	-Continue phase 3 exercises and add step- up/step-down, single leg wall slides, single leg squat to chair -Progress proprioceptive activities -May begin plyometric exercises at 10 weeks (low intensity vertical and lateral hopping to begin – initially both feet, progress to one foot; advance volume as tolerated) -Lateral movements including step, shuffle hopping, cariocas -Stationary bike add resistance as tolerated -ACL TRAC testing at 3 months -Consider ACE STRENGTH after 3 months

PHASE 5 16 Weeks+ Sessions weekly frequency to be determined	exercis -Advan backwa running shuttle specific strengt Symme -Consid	-Continue phase 4 exercises -Advance sprinting, backward running, zig-zag running, figure-of-eight running, carioca running, shuttle run and sport specific drills provided 70% strength on Limb Symmetry Index -Consider ACE SPORT at 6 months for return to
	9 mon SPOR function	honths and later at ths (or after ACE Γ) complete ACL hal test RAC testing at 3
	month month	s, 6 months, and 9
		s per protocol and ear by MD

FUNCTIONAL TEST/RETURN TO SPORT CLEARANCE CRITERIA:

- > 90% isometric quadricep strength

- > 90% comparable hop testing to contralateral side (single-leg, triple, cross-over, 6 meter timed hop test)

- > 90% quad index LSI with Biodex or HHD
- > 90% quad peak torque/weight on Biodex (if applicable)
- -Good form on vertical jump, deceleration shuttle test, Y-balance test
- No functional complaints, effusion, ROM restriction
- Good confidence with sport specific agility drills, running, and jumping
- Acceptable ACL-RSI score

This protocol is intended for the purposes of guiding post-surgical or post-injury rehabilitation exercises and goals. These guidelines may be interpreted by a certified physical or occupation therapist and tailored to meet patient specific goals and expectations. Other specific modifications may be made by Dr. Butterfield depending on adjuvant surgical procedures, surgical findings, or rehabilitation progress.

Please fax initial physical therapy assessment and progress notes to Dr. Butterfield at 763-786-3320. You may direct questions regarding this protocol or patient progress to our office at 763-786-9543 or email at MatthewButterfield@tcomn.com