

## Matthew S. Butterfield, MD

## ACL RECONSTRUCTION AND MCL +/- POSTEROMEDIAL CORNER REPAIR OR 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 for shower/hygiene) -Brace locked in extension with ambulation and sleeping at 0 degrees -Unlock brace when seated for 0 to 90 degrees range of motion -Crutches for assisted ambulation -Touch down weight bearing -AVOID heel slides and hamstring sets	-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 -Quad sets, gastroc/soleus stretches -Side lying hip/core strengthening
PHASE 2 Next 4 Weeks (2-6) 1-2 Sessions/week	-Hinge Knee brace x 6 weeks (may remove for shower/hygiene) -Brace locked in extension with ambulation and sleeping at 0 degrees -Unlock brace when seated for 0 to 120 degrees range of motion -Crutches for assisted ambulation -Touch down weight bearing -AVOID heel slides and hamstring sets	-Continue to advance PROM/AAROM/ AROM to reach full ROM	-Continue phase 1 exercises -Quad setting, straight leg lift, prone ankle hang, standing toe raise, hip abduction, wall slides, front/side planks, advance hip/core

PHASE 3 Next 4 Weeks (6- 10) 2 Sessions/week	-Advance to full weight bearing as tolerated -Unlock brace with ambulation at 7 weeks -Discontinue crutches as able at 7 to 8 weeks -Discontinue brace at 8 weeks -Progress to functional brace at 8 weeks	-Continue to advance PROM/AAROM/ AROM to reach full ROM	-Continue phase 2 exercises and add closed chain exercises, hamstring work including supine/seated heel slides and hamstring curls, lunges, seated leg press 0 to 90 degrees, proprioception exercises, balance/ core/hip/glutes, -Daily stretching including prone quadriceps, hamstrings, and calf -Stationary bike to increase ROM at 8 weeks
PHASE 4 Next 6 Weeks (10- 16) 1-2 Sessions/week	-Continue functional brace	-Continue to advance PROM/AAROM/ AROM to reach full ROM	-Continue phase 3 exercises and add double knee bends, double leg bridges, reverse lunge, leg press 0 to 90 degrees, mini squats 0 to 45 degrees -Add step-up/step- down, single leg wall slides, single leg squat to chair at 12 weeks -Progress proprioceptive activities -ACL TRAC testing at 3 to 4 months

PHASE 5 16 Weeks+ Sessions weekly frequency to be determined	-Discontinue functional brace as able	-Continue phase 4 exercises -Begin walk-run program at 16 weeks -May begin plyometric exercises at 20 weeks (low intensity vertical and lateral hopping to begin – initially both feet, progress to one foot; advance volume as tolerated) -Consider ACE STRENGTH after 5 months -Lateral movements including step, shuffle hopping, cariocas -Stationary bike add resistance as tolerated -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 7 months for return to sport focus -At 6 months and later at 9 months (or after ACE SPORT) complete ACL functional test -ACI_TRAC_testing at
		after ACE SPORT) complete ACL

## 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