



Edward Becker, MD

813.684.BONE (2663)

www.omgtb.com

ACL & MCL RECONSTRUCTION REHABILITATION PROTOCOL

PATIENT NAME:

DATE OF SURGERY:

BODY PART/SIDE:

IMPORTANT ITEMS:

- 1 Brace to be worn at all times **LOCKED IN EXTENSION** [including when sleeping] until 1st post-op visit [10-14 days]; Can be removed for hygiene and exercises
- 2 Brace can be removed for **SLEEPING ONLY** after 1st post-op visit.
- 3 Continue use of brace for 4-6 weeks, **LOCKED IN EXTENSION FOR AMBULATION**
- 4 Discontinue brace *no sooner* than **6 WEEKS POST-OP** once patient can perform straight leg raise **WITHOUT** extension lag

PHASE I PRECAUTIONS

- Non-weightbearing VS toe-touch weightbearing for **6 WEEKS POST-OP**

PHASE I [0-2 WEEKS]	
ROM	STRENGTH
Begin passive, active-assisted, and active ROM [limit 45°]	Quad sets Patellar mobilizations
Emphasize regaining FULL EXTENSION	SLR with brace locked in extension [until quad strength prevents extension lag]
Initiate gastroc/soleus stretching	Side-lying hip/core

GOALS TO PROGRESS TO PHASE II

- Pain and inflammation controlled
- Regain full knee extension, progress flexion
- Protect graft fixation

PHASE II PRECAUTIONS

- Continue phase I precautions
- Unlock brace 0°-90°, can be removed when sleeping

PHASE II [2-6 WEEKS]	
ROM	STRENGTH
Advance ROM slowly [limit 90°], progress 10°-20°/week]	Progress phase I exercises

GOALS TO PROGRESS TO PHASE III

- Pain and inflammation controlled
- Regain full knee extension, progress flexion

- Protect graft fixation
- Discontinue brace at **6 WEEKS POST-OP** if no extension lag; can transition into playmaker knee brace or functional brace if available

PHASE III PRECAUTIONS

- Begin progressive WBAT at 25%, advancing weekly to full weightbearing by **8 WEEKS POST-OP**

PHASE III [6-12 WEEKS]	
ROM	STRENGTH
Advance to full ROM [no limit]	Progress phase I & II exercises
	Advance hip/core strengthening; add prone and side planks
	Begin light resistance stationary bike
*Isolated hamstring stretching can begin at 6 WEEKS POST-OP	Begin closed-chain quadriceps exercises
	Begin toe raises, hamstring curls, and step-ups
	Initiate balance/proprioception activities

GOALS TO PROGRESS TO PHASE IV

- NO** quadriceps atrophy
- Progress strength and balance
- Improve endurance

PHASE IV [12-16 WEEKS]	
ROM	STRENGTH
Full, unrestricted ROM	Advance closed-chain strengthening
	Progress balance/proprioception activities
	Stairmaster, elliptical begin at 12 WEEKS POST-OP
	Initiate running progression [straight-ahead only] at 12 WEEKS POST-OP

***If patient received functional brace, they can wear it for jogging and proprioception activities*

GOALS TO PROGRESS TO PHASE IV

- NO** quadriceps atrophy
- Progress strength and balance
- Improve endurance

PHASE IV [16-24 WEEKS]	
ROM	STRENGTH
Full, unrestricted ROM	Begin jumping progression at 16 WEEKS POST-OP
	Advance running progression at 20 WEEKS POST-OP [sprinting, backwards running, cutting/pivoting/changing direction]
	Initiate plyometric program and sport-specific drills

GOALS TO PROGRESS TO PHASE V

- Requires clearance from **SURGEON**
- Symmetric thigh musculature and performance within 10% of uninvolved limb

PHASE V [24+ WEEKS]

ROM	STRENGTH
Full, unrestricted ROM	Gradual return to sports participation after completion of RTP**

*PLYOMETRIC TRAINING PROGRAM RECOMMENDATIONS	
12-16 WEEKS	Double-leg hops [advance to 30 reps]
16-20 WEEKS	Add alternating single-leg hop [advance to 15 reps each foot]
	Add double-leg hops [forward, side-to-side, back] advancing to 10 reps each; distance 6" to 12"
20-26 WEEKS	Add single-leg hop [advance to 10 reps]
	Increase distance of double-leg forward hop as tolerated
	Add triple hop
26-36 WEEKS	<i>If appropriate for desired sport or activities</i>
	Add double-leg rotational hops [90° turn midair, advance to 5 reps]
	Progress double-leg rotational hops [180° turn midair, advance to 5 reps]

*RUNNING AND AGILITY DRILL PROGRESSION RECOMMENDATIONS	
<i>**May jog on any surface as tolerated, gradually increasing distance and speed</i>	
Non-linear running [zig-zag, backwards, carioca each side for 50 yards each]	Start with "walk-through" at <1% max effort
	Increase 10% effort each session as tolerated
Agility drills begin once non-linear running mastered [shuttle run, box drill, weaves]	Start with "walk-through" at <1% max effort
	Increase 10% effort each session as tolerated
Sport specific training/practice once agility drills mastered	Start with "walk-through" at <1% max effort
	Increase 10% effort each session as tolerated

RETURN TO SPORT CRITERIA

- Requires clearance from **SURGEON**
- Return to play testing [RTP] recommended for competitive athletes intending to return to sport at 22-24 weeks**
- FULL, PAINFREE** function **WITHOUT** signs of instability
- FULL** return to contact sports **ANTICIPATED** at 7-9 **MONTHS**