



ACL Repair with Meniscal Repair (Inside Out)

Post-Operative Rehabilitation Protocol

0-2 weeks

- NWB for 6 weeks
- ROM: 0-90° with emphasis on full extension
- Patella mobilization
- SLR supine with brace locked at 0°
- Quad Sets with brace locked at 0°
- Ankle Pumps
- Short crank (90mm) ergometry

2-6 weeks

- Continue NWB status
- Brace locked in full extension until postop week 6
- ROM: 0-125° (maintain full extension)
- Active knee extension to 40°
- Standard (170 mm) ergometry (ROM >115°)
- Avoid tibial rotation until 6 weeks

6-14 weeks

- Begin WBAT progression advance to PWB (25% then 50%) starting at 6 weeks
- Can begin to wean off crutches once gait is normalized and non-antalgic
- Discontinue brace once adequate quad control
- Progressive squat program
- Proprioception training
- Initiate step-up program, progress to step down
- Leg press, lunges
- Isotonic knee extensions (90-40°, close chain preferred)
- Agility exercises (sport cord)
- Retrograde treadmill ambulation

14-22 weeks



- Begin forward running (treadmill) program when 8" step down satisfactory
- Continue strengthening and flexibility program
- Advance sports-specific agility drills
- Start plyometric program
- Plyo Prep Screen when initiating running and/or

Weight Bearing Status

NWB x 6 weeks

Brace Settings

Locked straight x 6 weeks when ambulating or sleeping. Otherwise open brace once good quad control

ROM Restrictions

PROM 0-90° beginning POD 1



jumping. Schedule via QR code or email spc@rushortho.com

>22 weeks



- Advance planning to program, return to sport (MD directed)
- Lower Body Assessment when initiating return to sport progression. Schedule via QR code email or spc@rushortho.com



Exercise	Week																							
	1	2	3	4	5	6	7	8	9	10	12	16	20	24										
Initial Exercises:																								
ROM Goals	0-90°			0-125°			Progress to full																	
Flexion/extension, heel slides																								
Patella/Tendon mobilization																								
Quad Series	0° ISOs, SLR				60° ISO				70-30° arc-resisted				Full arc resisted											
Hamstring strength progression	No isolated, resisted HS								ISOs, hip based				Knee-based resisted arc											
Calf stretch, seated HS stretch																								
Ankle Pumps																								
Crutch weaning	NWB																							
Heel prop knee extension stretch																								
SLR (w/ brace until quad control restored)																								
SLR hip ABD, ADD, Ext (w/ brace on)																								
Bridge in knee extension-calves over balls																								
Weight-bearing Strength Exercises:																								
Marching into brief SLS	1	2	3	4	5	6	7	8	9	10	12	16	20	24										
Leg Bridges (2 → 1 leg)	NWB																							
SLS Balance progressions																								
Squat/Leg press (ISO → reps, 2 → 1 leg)									0-45°		0-70°		>70° gradual											
Step-up/Lunge Progressions									ISOs		0-70°		>70°											
Dead Lift (2 →1 leg)																								
Banded resisted directional stepping																								
Cardiovascular Exercises:																								
Bike with both legs-no resistance	1	2	3	4	5	6	7	8	9	10	12	16	20	24										
Bike with both legs- resistance	NWB																							
Aqua jogging																								
Treadmill-walking (no limp)																								
Swimming with fins-light flutter kick																								
Elliptical Trainer																								
Stair stepper																								
*Note for Cardio Exercises						Must tolerate daily walking with no limp & no significant increase in pain/swelling prior to initiating WB cardio (walk, elliptical, stepper)																		
Agility Exercises:																								
Running Progression	1	2	3	4	5	6	7	8	9	10	12	16	20	24										
Initial-Single Plane	NWB																							
Advance-Multi Directional																								
Functional Sports Test																								
High Level Activities:																								
Golf Progression	1	2	3	4	5	6	7	8	9	10	12	16	20	24										
Outdoor biking, hiking, running	NWB																							
Return to Full Sport at 9 months post-op																								



Quad Series:

- Quad sets (5 sec hold) also quick contractions (NMES to supplement)
- Prone quad sets
- SLR with no extension leg
- Progression of Quad Strengthening (WB exercises at 6 weeks)
 - LAQ in safe range -no added resistance to begin
 - Once weight bearing tandem stance TKE with 5 sec hold
 - Isometric wall sit
 - SLR with resistance
 - Step up progression
 - Squat progression
 - Leg press progression
 - Lunge progression

Hamstring Series:

- Hamstring stretching (supine/prone)
- Hamstring set (heel dig)- contract hamstring with knee flexed pressing heel into the floor (5 sec hold)
- Hamstring curls
- Progress to resisted hamstring curl

Sport Test Exercises:

- Goals: impact training and introduction of directional drills (initiate at 20-24 weeks)
- Double leg squat jumps
- Box jumps
- Speed skaters
- Double leg jumps for height and distance progress to single leg as tolerated
- Blaze pod change of direction drills

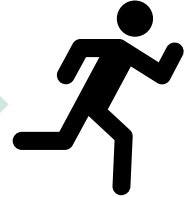
Further Clarifications and Considerations

- May begin to implement BFR as early as 1 week into post-op period
- Functional Sports Test: Baseline completed around 7 months post-op with subsequent test at 9 months



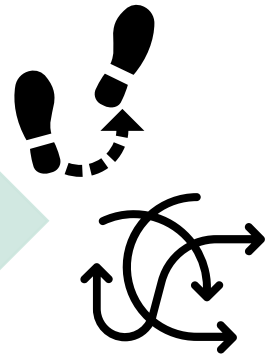
Return to Running Criteria

- Trace effusion, flexion within 5 degrees of contralateral side
- LSI on anterior reach Y balance test $\geq 90\%$
- LSI on quadriceps torque output on isometric measurement $\geq 75\%$
- 12" SL squat tolerance
- Able to walk > 1 mile with no limping or pain
- Able to "hop" with UE assist on operative leg 5 times without pain or compensation
- SL balance with eyes closed 30 seconds without loss of balance



Return to Agility/Change of Direction Criteria

- Return to running criteria listed above met
- No effusion
- Full ROM
- Quad LSI on isokinetic $\geq 85\%$
- Hamstring LSI on isokinetic $\geq 85\%$
- LSI on anterior reach Y-balance $\geq 95\%$
- SL hopping pain-free and effusion free



Return to Sport Criteria

- In order to test must demonstrate full AROM, no pain, no/trace effusion, 5/5 strength, negative lachman and pivot shift, LSI $\geq 95\%$ hamstring curl and leg press
- Quadricep strength $\geq 95\%$ of contralateral side (< 2cm of atrophy)
- Able to perform single leg squat with correct form
- LSI SL hop $\geq 95\%$
- Y-Balance $\geq 95\%$ (mean of 3 trials in anterior, posterolateral, posteromedial/100)
- Vertical jump test, single leg hop distance, and timed single leg hop over 20 -feet $\geq 90\%$ of contralateral side

