



## Lower Extremity Fasciotomy Post-Operative Rehabilitation Protocol

### 0-2 weeks

- Full WBAT immediately
- Crutches for 24-48 hours can discontinue once gait normalizes
- Full Active/Passive ROM
- Patella mobilization
- SLR supine
- Quad Sets
- Heel Slides
- Ankle Pumps

### 2-8 weeks

- Full weight bearing
- Progress with ROM until full
- Wall sits, lunges, balance exercises
- Closed chain quad strengthening
- Modalities PRN

**Weight  
Bearing Status**

WBAT

**ROM  
Restrictions**

Full  
AROM/PROM  
beginning POD  
1



Exercise	Week															
	1	2	3	4	5	6	7	8	9	10	12	16	20	24		
<b>Initial Exercises:</b>																
ROM Goals	0-90°				0-125°				Progress to full							
Flexion/extension, heel slides	█															
Flexion/extension- seated	█															
Patella/Tendon mobilization	█															
Quad Series	█															
Hamstring Sets	█															
Sit and Reach for Hamstrings	█															
Ankle Pumps	█															
Crutch weaning	WBAT															
Heel prop knee extension stretch	█															
SLR (w/ brace until quad control restored)	█															
Toe and Heel Raises		█														
Balance Series		█														
<b>Weight-bearing Strength Exercises:</b>																
Double Knee Bends	1	█														
Double Leg Bridges		█														
Reverse Lunge, static holds				█												
Beginning cord exercises				█												
Dead Lift (2 → 1 leg)				█												
Squat/Leg press (ISO → reps, 2 → 1 leg) (80-0° arc)				█												
Sports Test Exercises						█										
<b>Cardiovascular Exercises:</b>																
Bike with both legs-no resistance		█														
Bike with both legs- resistance		█														
Aqua jogging				█												
Treadmill-walking 7% incline				█												
Swimming with fins-light flutter kick					█											
Elliptical Trainer					█											
Rowing					█											
Stair stepper					█											
<b>Agility Exercises:</b>																
Running Progression						█										
Initial-Single Plane						█										
Advance-Multi Directional								█								
Functional Sports Test								█								
<b>High Level Activities:</b>																
Golf Progression					█											
Outdoor biking, hiking, running								█								
Return to Sport									█							



### 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
  - 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
- 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:

- Double Knee Bends: feet shoulder width apart, bend knees to 30°, keeping knees behind the toes.
- Cord exercises (resistance band/cord): resisted double knee bends, resisted hamstring curls
- May begin to implement BFR as early as 1 week into post-op period
- Functional Sports Test: can be completed at around 6 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 and 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

