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## Common Peroneal Nerve Decompression 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

### 2-6 weeks

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

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	Week													
Exercise	1	2	3	4	5	6	7	8	9	10	12	16	20	24
Initial Exercises:	1								1			1		L
ROM Goals	0-	.90°		0	-125	5°			Pro	gres	s te	o fu		
Flexion/extension, heel slides			<u> </u>							0				
Flexion/extension- seated														
Patella/Tendon mobilization														
Quad Series														
Hamstring Sets														
Sit and Reach for Hamstrings														
Ankle Pumps														
Crutch weaning	W	BAT												
Heel prop knee extension stretch														
SLR (w/ brace until quad control restored)														
Toe and Heel Raises														
Balance Series														
Weight-bearing Strength Exercises:	1	2	3	4	5	6	7	8	9	10	12	16	20	24
Double Knee Bends											·			
Double Leg Bridges														
Reverse Lunge, static holds														
Beginning cord exercises														
Dead Lift (2 →1 leg)														
Squat/Leg press (ISO $\rightarrow$ reps, 2 $\rightarrow$ 1 leg) (80-0° arc)														
Sports Test Exercises														
Cardiovascular Exercises:	1	2	3	4	5	6	7	8	9	10	12	16	20	24
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														
Agility Exercises:	1	2	3	4	5	6	7	8	9	10	12	16	20	24
Running Progression														
Initial-Single Plane														
Advance-Multi Directional														
Functional Sports Test		1					T							
High Level Activities:	1	2	3	4	5	6	7	8	9	10	12	16	20	24
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<sup>o</sup>, 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

# Return to Running Criteria

- Trace effusion, flexion within 5 degrees of contralateral side
- LSI on anterior reach Y balance test ≥ 90%
- LSI on quadriceps torque output on isometric measurement ≥ 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 ≥85%
- Hamstring LSI on isokinetic ≥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 ≥95% hamstring curl and leg press
- •Quadricep strength ≥95% of contralateral side (< 2cm of atrophy)
- Able to perform single leg squat with correct form
  LSI SL hop ≥95%
- •Y-Balance ≥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 ≥90% of contralateral side

