



Phase 1 --- Initial 2 weeks of PT

OPERATIVE BUNION PROTOCOL

Focus area: Motion		Focus area: Strength		Focus area: Proprioception	
<i>PT</i>	<i>Patient Homework</i>	<i>PT</i>	<i>Patient Homework</i>	<i>PT</i>	<i>Patient Homework</i>
Joint mobilizations foot, ankle, first MTP Improve ROM of ankle, midfoot, forefoot, first MTP	Sitting to standing heel/toe rocking. Active toe extensions and toe curls.	Toe curls and toe extensions for foot intrinsics (start seated and progress to standing)		BAPs board standing: "bilateral stance to single leg stance", Clockwise/Counter Clockwise.	
Lymphatic drainage manipulation to reduce swelling and edema	Elevation with/without ice, as needed	Pain free forward lunges (easy to progressive).	Pain free forward lunges (easy to progressive)	Rocker board standing, bilateral stance to single leg stance; A-P	
Gentle to progressivle calf stretches, PF stretching as needed	Towel stretch progressing to full Wbing runner's stretch. Plantar Flexion stretch as needed/instructed by therapist.	T-Band stepping and reaching excercises. Squatting/Leg press as indicated. Step Ups Forward and side with knee opposite knee drive	T-Band resisted stepping. Step-ups with knee drive. Forward step downs. Medial step downs.	Stepping clocks of non-involved leg (sagittal and frontal plane)	Stepping clocks of non-involved leg (sagittal and frontal plane)
General lower extremity stretching (hip and knee) as indicated	As instructed.	Treadmill; Incline as tolerated, no greater than 2 level pain increase;	Treadmill as instructed by therapist.		
Custom orthotics with Morton's extension as needed. (OFAC typically fits with FM)	As needed.	Elliptical, as tolerated (holding to no holding.)	Elliptical as instructed.	**PT note: Manual Therapy, Electrical stimulation, ultrasound, GameReady Ice compression, and/or ice is to be utilized for pain and swelling.	
<i>Goals</i>		<i>Common frustrations</i>	<i>Recommendations</i>	<i>Physician Expectations</i>	
1. Decrease edema and stabalize/decrease pain levels	4. Increase strength and proprioception	Persistant Lack of 1st MTP ext.	Cont joint mobilization / stretching / manual therapy. Cont pt self stretching as part of HEP.	Stable / Predictable Edema. Walking in regular shoes with some difficulty. 1st MTP Ext with some progression (if not fused).	
2. Wean from walking boot, as indicated, if present	5. Educate patient on injury and rehabilitation process	Persistant Edema / Pain	Cont Manual Therapy each session x 3-5 min. Cont Vasopneumatic device in-clinc. Consider Compression garment.	A Bunionectomy is a surgical procedure that cuts off bone and realigns 1st MTP joint. Typically screws and sometimes a plate is utilized to stabilize the correction. Sometimes a 1st MTP fusion is performed if the initial deformity is more severe.	
3. Improve 1st MTP ext	6. Increase general soft tissue flexibility	Lack of PF Strength / Push off producing persistant gait deviation	Include seated and standing double to single leg heel raises. Promote "triple ext" of LE with glute medius strengthening		

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Focus area: Motion		Focus area: Strength		Focus area: Proprioception	
PT	Patient	PT	Patient	PT	Patient
Continue joint mobilizations as needed to improve 1st MTP ext and 1st ray, MTP joint, ST joint, and TC joint mobility. Continue Manual Therapy to improve edema 3-5 mins.	Progress to controlled standing toe extension stretch with toes against the wall. 3x30-60 sec stretch 2 x per day. Monitor pain.	Seated Heel Raises: Double to Single Leg. Standing Heel Raises: Double to Single Leg, upper body leaning on counter top.	Progress to standing Heel Raises: Double to Single Leg while upper body leans on counter top.	Continue with single leg stance with opposite extremity reach and Upper Extremity reach with progression of distance or standing surface.	Heel-toe walking to improve normal pattern (midstance and toe-off phases)
Treadmill forward and backward as tolerated. Elyptical as tolerated.		Continue Medial Step Downs, Forward Step Ups, and Forward Step Downs	Progress to Home with step ups and step downs if patient not already doing.	Single Leg BAPS level 2 or less.	Continue single limb balance progressing from modified single leg stance to single leg stance with dynamic movement
General Hip and Lower Extremity Flexibility as indicated		Multi-planar Lunges on stable to dynamic surfaces.	Multi-planar Lunges as indicated for HEP.	Single Leg Rebounder on stable to dynamic surfaces.	
		Initiate Plyometric ex if return to sports/running. See return to running progression when indicated.	Plyometric ex as indicated for HEP.		

Goals	Common frustrations	Recommendations	Physician Expectations
1. Increase 1st MTP ext to 60 deg as tolerated (IF NOT FUSED)	Persistent Lack of 1st MTP ext.	Cont joint mobilization / stretching / manual therapy. Cont pt self stretching as part of HEP.	Pt walking in regular shoes with some difficulty with stable/predictable edema and minimal to no pain. 1st MTP ext progressing (if not fused)
2. Minimal to abolished gait deviations with focus on midstance and toe-off phase	Persistent Edema / Pain	Cont Manual Therapy each session x 3-5 min. Cont Vasopneumatic device in-clinc. Consider Compression garment.	Ideally patient returned/returning to work
3. Stable/Predictable edema	Lack of PF Strength / Push off producing persistent gait deviation	Continue seated and standing double to single leg heel raises. Promote "triple ext" of LE with glute medius strengthening	Continued Therapy necessary if Pain, Strength, Overall Function not progressing as expected towards the patient's targeted return activities.
4. Minimal complaints of pain			



Return to Running Program

Walking Program

You must be able to walk, pain free, aggressively (4-5 miles per hour) for 30 minutes, preferably on a treadmill, before beginning the walk/jog program. A mile run generally consists of 1500 total foot contacts or 750 per foot. Advanced strengthening/plyometric exercises should be completed at high reps during Phase III of the PTT protocol totaling between 400 to 500 foot contacts/reps per session. This high repetition count of pain free exercises readies your soft tissues for the stress and strain that you undergo while running.

Walk/Jog Progression

You may begin this program on level ground if:

1. Completed the Walking Program and 1 week of Phase III protocol.
2. You have no pain with normal daily activities. (0 out of 10 on pain scale)

Program Progression

1. If the jogging hurts, stop, apply ice and return to the previous stage the next day. If pain/discomfort remains or increases, continue to return to a previous level until discomfort stabilizes or decreases.
2. If you have no pain when doing this activity level or afterwards, and you have no discomfort or tightness that limits your normal movements the next morning, proceed to the next stage.

	Walk	Jog	Repetitions	Total time
Week 1	5 minutes	1 minute	5 times	30 minutes
Week 2	4 minutes	2 minutes	5 times	30 minutes
Week 3	3 minutes	3 minutes	5 times	30 minutes
Week 4	2 minutes	4 minutes	5 times	30 minutes
Week 5	Jog every other day with a goal of reaching 30 consecutive minutes, begin with 5 minutes of walking, gradually increasing the pace. End with 5 minutes of walking, gradually decreasing the pace to a comfortable walk.			