



Modified Brostrom Rehabilitation Guideline

This rehabilitation program is designed to return the individual to their activities as quickly and safely as possible. It is designed for rehabilitation following a Modified Brostrom procedure. Modifications to this guideline may be necessary depending on physician-specific instruction, degree of the tear, specific tissue healing timeline, chronicity of injury and other contributing impairments that need to be addressed. This evidence-based guideline is criterion-based; time frames and visits in each phase will vary depending on many factors including patient demographics, goals, and individual progress. This guideline is designed to progress the individual through rehabilitation to full sport/ activity participation. The therapist may modify the program appropriately depending on the individual's goals for activity.

This guideline is intended to provide the treating clinician a frame of reference for rehabilitation. It is not intended to substitute clinical judgment regarding the patient's post-injury care, based on exam/ treatment findings, individual progress and/or the presence of concomitant injuries or complications. If the clinician should have questions regarding progressions, they should contact the referring physician.

General Guidelines/Precautions

- This surgical procedure can be highly variable and progressions will depend on physician preference. Make sure to be in contact with the referring physician as needed.
- This guideline is intended for patients with internal bracing, if internal bracing was NOT utilized, weight-bearing, ROM and return to sport may be delayed.
- Formal PT may start soon after surgery.
- If available and per physician approval, Blood Flow Restriction (BFR) training can begin after suture removal and progress along with recommendations. Please refer to the BFR guideline for more detailed information.

PHASE	SUGGESTED INTERVENTIONS	GOALS/MILESTONES FOR PROGRESSION
<p>Phase I 0-4 weeks (1-2 visits as needed)</p>	<p>Specific Instructions: 1. Gait training within WB restrictions 2. Biking may be allowed during this phase in boot</p> <p>Exercise Examples:</p> <ul style="list-style-type: none"> • 0-2 weeks: <ul style="list-style-type: none"> o Ankle PF/DF ROM to tolerance, focus on slow controlled movement, toe curls/towel crunches, proximal ROM/strength, RICE • 2-4 weeks: <ul style="list-style-type: none"> o Sub-max, pain-free isometrics in neutral (all planes) o WBAT in boot 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> • Patient may or may not need assistance depending on their level of support at home.
<p>Phase II Week 4 to 8 Strengthening/ROM</p>	<p>Specific Instructions: 1. Gait training, weaning from assistive device. 2. 4-6 weeks: Ankle brace 3. 6-8 weeks: Brace during sports-specific activities 4. Gentle ROM into inversion to avoid excessive stress over the surgical site 5. No passive stretching into plantarflexion until 8 weeks</p> <p>Exercise Examples:</p> <ul style="list-style-type: none"> • NuStep/Bike/Elliptical out of boot • 4-6 weeks: <ul style="list-style-type: none"> o Multi-angle, sub-max, pain-free isometrics (all planes) • 6-8 weeks: <ul style="list-style-type: none"> o AROM all planes to tolerance o Progress to strengthening with band for dorsiflexion, plantarflexion, eversion, inversion o Proprioception activities progressing from double leg to single leg stance <p>Manual Therapy</p> <ul style="list-style-type: none"> • Soft tissue mobilization – scar tissue mobilization • Manual therapy to metatarsals – avoid mobilizing talocrural and subtalar joints 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> • Transition to normalized gait pattern in walking boot/ankle brace/shoe as tolerated • Prevention of deconditioning • Prevention of scar adhesions <p>Criteria to advance:</p> <ul style="list-style-type: none"> • Normalized gait without pain with involved ankle with or without ankle brace • Pain-free eversion against gravity
<p>Phase III 8-12 weeks Advanced Strengthening</p>	<p>Specific Instructions: 1. Normalize gait pattern 2. Normal activities of daily living 3. Normalize strength 4. Gradual progression into multiplanar movement patterns</p> <p>Exercise Examples:</p> <ul style="list-style-type: none"> • Progress to include closed chain strengthening. Focus on retraining functional movements: <ul style="list-style-type: none"> o Squatting o Hinging o Bridging o Lunging o Heel raises • Advance proprioception and balance to varied surfaces with perturbations/dual-tasking <p>Manual Therapy</p> <ul style="list-style-type: none"> • Soft tissue mobilizations, grade 1-3 talocrural and subtalar mobilizations as needed 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> • Full AROM by 12 weeks • No edema post-activity • Normalized, pain-free gait on level ground, stairs and inconsistent surfaces with and without ankle support

<p>Phase IV</p> <p>12+ weeks</p> <p>Return to Activity</p>	<p>Specific Instructions:</p> <ol style="list-style-type: none"> 1. Increase exercise intensity of cardio (bike, elliptical) to prepare for jogging. (See Interval Return to Running Guideline). 2. Advance plyometrics and change of direction drills starting in AP plane and progressing to lateral movements and diagonals. 3. Progress workloads in the weight room. 4. Complete sport specific functional training. 5. Complete Ankle Return to Sport testing. <p>Exercise Examples:</p> <ul style="list-style-type: none"> • Progress per Return to Running guideline • Advanced balance unstable surface multi-tasking • Dynamic movements: RDL, single leg squat, ball drills • Progress to agility drills, cutting, jumping, hopping. 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> • No apprehension with high level activity and direction changes • No apprehension with sport specific drills and activities
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****NOTE:** Progression of functional activities should be performed only as pain and proper biomechanics allow. Emphasis should be on proper shock absorption and control of dynamic valgus stress at knee (hip medial rotation with knee valgus) with each task performed. Progression to single limb-based tasks (deceleration, hopping and cutting) should not be performed until double limb activities have been mastered. Activities requiring dynamic control of rotational stress at the knee (cutting, multiple plane lunges/jumps/hops) should not be performed until sagittal and frontal plane control has been mastered. Return to sport may occur at any time during this stage as cleared by physician and as progress and goal achievement occurs.

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