

Modified Broström Procedure

GUIDELINE

REAHB SERVICES



Purpose:

This guideline is designed to return the individual to their full activities as quickly and safely as possible following a Modified Broström Procedure with an internal brace. Modifications to this guideline may be necessary dependent on physician specific instruction or other procedures performed. This evidence-based guideline is criterion-based; time frames and visits in each phase will vary depending on many factors. The therapist may modify the program appropriately depending on the individual's goals for activity following a Modified Broström Procedure with an internal brace

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

PHASE	SUGGESTED INTERVENTIONS	MILESTONES FOR PROGRESSION
Phase I Weeks 0-4	Immobilization: <ul style="list-style-type: none">• Cast or walking boot WB Status: <ul style="list-style-type: none">• Weeks 0-2: Non-weight bearing• Weeks 2-4: WBAT in walking boot Therapy <u>Weeks 0-2:</u> <ul style="list-style-type: none">• NWB in boot• Hip, knee and core strengthening• Toe curls, toe extension, toe spreads• Cryotherapy compression• Ankle PF/DF ROM to tolerance<ul style="list-style-type: none">— Focus on slow controlled movement• Bike in boot <u>Weeks 2-4:</u> <ul style="list-style-type: none">• Transfer and gait training with optimal AD• Sub-max., pain-free isometrics in neutral (all planes)• Low level double proprioception- weight shifting, reaching, perturbations	Goals: <ul style="list-style-type: none">• Edema control/reduction• Protection of surgical site• Independence with safe mobility Criteria to Advance: <ul style="list-style-type: none">• Reduction in pain and edema
Phase II Weeks 4-8	WB Status: <ul style="list-style-type: none">— FWB	Goals: <ul style="list-style-type: none">• Protection of the repair

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	<ul style="list-style-type: none"> — Start in walking boot and progress to semi-rigid ankle stirrup orthotic <p>Precautions:</p> <ul style="list-style-type: none"> • Avoid mobilizing talocrural and subtalar joints <p>Therapy:</p> <p><u>Weeks 4-6:</u></p> <ul style="list-style-type: none"> • Multi-angle ankle sub-max isometric strengthening in all planes • AROM and AAROM for all planes of ankle mobility • Continue proprioception activities involving double leg stance • Gait training progressing to full weight bearing, weaning from AD, progressing to ankle brace • NuStep, Alter-G • Continue with hip, knee and core strengthening • Light soft tissue mobilization as indicated • Metatarsal joint mobilizations as indicated, avoid mobilizing talocrural and subtalar joints <p><u>Weeks 6-8:</u></p> <ul style="list-style-type: none"> • Progress strengthening with bands for dorsiflexion, plantarflexion, eversion, inversion • Progress proprioception activities from double leg to single leg stance 	<ul style="list-style-type: none"> • Normalized gait pattern with walking boot • Prevention of scar adhesions <p>Criteria to Advance:</p> <ul style="list-style-type: none"> • Normalized gait without pain with involved ankle in ankle brace • Pain-free eversion against gravity
<p>Phase III</p> <p>Weeks 8-12</p>	<p>Precautions:</p> <ul style="list-style-type: none"> • No plyometrics until week 11 <p>Therapy:</p> <ul style="list-style-type: none"> • Ankle AROM in all planes with alphabet, circles, BAPS board, etc. • Standing BAPS board • Gastrocnemius/soleus stretching • Advance proprioception and balance to unilateral stance, varied surface, perturbations and dual task • Gait: <ul style="list-style-type: none"> — Forward march — Backward march — Side stepping — Backward stepping • Bike, elliptical • Soft tissue mobilization and grade I-III joint mobilizations as indicated to talocrural and subtalar joints 	<p>Goals:</p> <ul style="list-style-type: none"> • Full ankle ROM • 5/5 strength in all ankle muscle groups • Normalized, pain-free gait on even, uneven surfaces and stairs <ul style="list-style-type: none"> — With or without ankle orthoses as needed • No apprehension with high level activity or direction changes <p>Criteria to Advance:</p> <ul style="list-style-type: none"> • Full ankle strength on manual muscle testing

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	<ul style="list-style-type: none"> • Closed chain strength strengthening-focusing on retraining functional movements including squatting, hinging, bridging, lunging, heel raises • Plyometrics: <ul style="list-style-type: none"> — Delay plyometric progression until patient can complete 10 repetitions pain-free — Horizontal leg press jumps — Bilateral jumps: <ul style="list-style-type: none"> ⇒ Vertical jump in place ⇒ Up and down from 4" and 6" blocks ⇒ Depth jumps ⇒ Up and down from 8" and 12" block ⇒ Lateral jumping over line ⇒ Up and over 4" block ⇒ Jumps in series with multiple planes — Single leg jumps: <ul style="list-style-type: none"> ⇒ Use bilateral jump progression 	<ul style="list-style-type: none"> • Single leg balance equal to contralateral side
Phase IV Weeks 12-16	Precautions: <ul style="list-style-type: none"> • Continue ankle brace during sports for 6 months for increased stability and proprioception Therapy: <ul style="list-style-type: none"> • Initiate jogging with progression to running (Alter-G as needed) • Jump rope • Proprioception, plyometric and change of direction drills starting in AP plane and progress to lateral movements and diagonals: <ul style="list-style-type: none"> — Retro jog — Side shuffle — Carioca — Bounding — Jog-sprint-jog — Figure 8s — 45° cuts, 90° cuts — Single leg hop for distance & for time • Sport-specific movements 	Goals: <ul style="list-style-type: none"> • No apprehension with sport-specific drills and activities • Stability with high velocity movements Return to Sport: <ul style="list-style-type: none"> • May return to sport after receiving clearance by orthopedic surgeon along with PT/AT