This rehabilitation program is designed to return the individual to their full activities as quickly and safely as possible following a Brostrom procedure. Modifications to this guideline may be necessary dependent on physician specific instruction or other procedures performed. This evidence-based Brostrom procedure 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 Brostrom procedure.

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-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.

* **Weight bearing Progression:**
	+ Weeks 0-3: Non-weight bearing
	+ Weeks 3-6: Toe touch weight bearing in boot or cast
	+ Weeks 6+ : WBAT with walking boot progressing to ankle stabilizing orthoses

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| --- | --- | --- |
| **Phase** | **Suggested Interventions** | **Goals/Milestones for Progression** |
| **Phase I** Weeks 0 – 6  | Immobilization: Cast or walking boot WB Status: NWB weeks 0-3, Toe touch weight bearing weeks 3-6Precautions: Avoid passive or active ankle ROMTherapy: * Hip, knee and core strengthening
* Toe curls, toe extension, toe spreads
* Transfer and gait training with optimal AD
 | Goals of Phase:1. Edema control/reduction
2. Protection of surgical site
3. Independence with safe mobility

Criteria to Advance to Next Phase:1. Reduction in pain and edema
 |
| **Phase II**Weeks 6 - 8 | WB Status: WBAT; start progressive protective weight bearing first in walking boot, and the progressing to semi-rigid ankle stirrup orthotic. Precautions: No ROM into inversion (active, active-assisted or passive). No stretching into plantarflexion. Avoid mobilizing talocrural and subtalar joints. Therapy:* Ankle sub-max isometric strengthening in neutral (all planes except inversion)
* AROM and AAROM for plantarflexion and dorsiflexion
* Proprioception activities involving double leg stance
* Gait training progressing to full weight bearing, weaning from AD
* Nustep, Anti-gravity treadmill
* Continue with hip, knee and core strengthening
* Light soft tissue mobilization as indicated
* Joint mobilizations as indicated, avoiding tensioning of CFL and ATFL
 | Goals of Phase:1. Protection of the repair
2. Normalized gait pattern with walking boot
3. Prevention of scar adhesions

Criteria to Advance to Next Phase: 1. Normalized gait without pain with involved ankle in ankle brace.
2. Pain-free eversion against gravity
 |
| **Phase III**Weeks 8 – 12 | Precautions: No plyometrics until week 11 Therapy:* Start gentle AROM into inversion
* Ankle AROM in all planes with alphabet, circles, BAPS board, etc.
* Standing BAPS board
* Progression of ankle strengthening from short arc isotonics to full arc isotonics to eccentrics
* Gastrocnemius/soleus stretching
* Proprioception activities involving unilateral stance
* Gait drills: forward march, backward march, side stepping, backward stepping
* Biking, elliptical
* Soft tissue mobilization and joint mobilizations as indicated

Plyometric Progression (Week 11):* Horizontal leg press jumps
* Bilateral jumps: Vertical jump in place, up to 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

Progress as above for single leg jumps. \*Delay plyometric progression until patient can complete 10 repetitions pain-free.   | Goals of Phase: 1. Full ankle ROM
2. 5/5 strength in all ankle muscle groups
3. Normalized, pain-free gait on even, uneven surfaces and stairs (with or without ankle orthoses as needed)
4. No apprehension with high level activity or direction changes

Criteria to Advance to Next Phase: 1. Full ankle strength on manual muscle testing
2. Single leg balance equal to contralateral side
 |
| **Phase IV**Weeks 12 – 16  | Precautions: Continue use of ankle brace during sports for 6 months for increased stability and proprioception Therapy: * Initiate jogging with progression to running
* Jump rope
* Proprioception and plyometric activities
	+ Retro jog, side shuffle, carioca, bounding, jog-sprint-jog, figure eights, 45 degree cuts, 90 degree cuts, single leg hop for distance, single leg hop for time
* Sport-specific movements
 | Goals of Phase: 1. No apprehension with sport-specific drills and activities
2. Stability with high velocity movements

Return to Sport:1. May return to sport after receiving clearance by orthopedic surgeon along with physical therapist/athletic trainer.
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