This rehabilitation program is designed to return the individual to their full activities as quickly and safely as possible following a Modified Brostrom 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 Brostrom procedure with an internal brace.

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: (With internal bracing system)**
	+ Weeks 0 - 2: Non-weight bearing
	+ Weeks 2 - 4: WBAT with walking boot
	+ Weeks 4 + : Full weight bearing with walking boot progressing to ankle stabilizing orthoses

|  |  |  |
| --- | --- | --- |
| **Phase** | **Suggested Interventions** | **Goals/Milestones for Progression** |
| **Phase I** Weeks 0 – 4  | Immobilization: Cast or walking boot WB Status: NWB weeks 0 – 2, WBAT weeks 2 – 4 in walking bootPrecautions: Avoid passive or active ankle ROM Therapy: * Hip, knee and core strengthening
* Toe curls, toe extension, toe spreads
* Transfer and gait training with optimal AD
* Double leg weight shifting
 | 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 4 - 8 | WB Status: Full weight bearing; start first in walking boot, and the progress to semi-rigid ankle stirrup orthotic. Precautions: Avoid mobilizing talocrural and subtalar joints. Therapy:* Ankle sub-max isometric strengthening in neutral
* AROM and AAROM for all planes of ankle mobility
* 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 in ankle brace
2. Pain-free eversion against gravity
 |
| **Phase III**Weeks 8 – 12 | Precautions: No plyometrics until week 11 Therapy:* 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
* Bike, elliptical
* Soft tissue mobilization and joint mobilizations as indicated

Plyometric Progression (Week 11):* Horizontal leg press jumps
* Bilateral jumps: Vertical jumps 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.
 |