



Brostrom Repair with Internal Brace

Post-Operative Physical Therapy Protocol (CSMO)

General Notes

- **Week 0** begins on the date of surgery and ends the day prior to the patient being 1 week post-operative (p/o).
- This protocol is designed for an **athletic population**, with a target **return to sport (RTS) at 14–16 weeks** post-operatively.
- For patients without a goal of returning to sport within this timeframe, it is recommended to **progress one week behind** this protocol.
- **Numbers in parentheses** indicate the week(s) post-operative during which the exercise may be initiated.

Phase I: Protection & Early Mobility (Weeks 0–2)

- Non-weight bearing (NWB) for 2 weeks in cast or boot

Phase II: Early Rehabilitation (Weeks 2–3)

- Initiate physical therapy per physician order
- Progress to partial weight bearing (PWB) in boot
- **Avoid active inversion**

Exercise Options:

- Ankle AROM: plantarflexion/dorsiflexion (2)
- Towel calf stretch (2)
- Toe scrunches / arch strengthening (2)
- Plantar fascia ball massage (2)
- Seated heel raises with weight (2)
- Stationary bike out of boot (2–3)
- Weight shifting activities (3)
- Resisted plantarflexion/dorsiflexion with bands (3)
- AROM eversion (3)
- Double-leg squats (3)
- Bridges on ball, straight leg raises (SLR), long arc quads (LAQ) (2–3)
- Initiate isometric inversion/eversion (3)
- AlterG treadmill walking at 55–65% body weight (3)

Phase III: Strengthening & Stability (Weeks 4–6)

- Weight bearing as tolerated (WBAT) in boot beginning at 4 weeks p/o
- Transition out of boot into ASO or Level 3 ankle brace by 6 weeks p/o

Exercise Options:

- Progress previous exercises
- Standing hip 3-way or fire hydrants (4)
- Step-ups (4)
- AROM inversion (4)
- Tandem stance progressing to single-leg stance (SLS) on stable surfaces (4–5)
- Initiate resisted inversion/eversion (5)
- Single-leg squats (shallow, progressing to 90°) (5)
- Standing double-leg heel raises (5), progress to eccentric loading (DL → SL) (6)
- Lateral stepping with resistance (6)
- Weighted squats (6)
- Forward or lateral eccentric step-downs (6)

Phase IV: Advanced Strength & Return to Impact (Weeks 7–10)

- Jogging progression: gravity-minimized treadmill transitioning to overground running
- Single-leg heel raises
- Forward or reverse lunges (no lateral lunges)
- Sled pushes and pulls
- Dynamic single-leg stance with upper and/or lower extremity movement; progress to unstable surfaces (8+)
- Initiate light agility and plyometrics, including:
 - Double-leg snap-downs
 - Line hops or wall taps
 - Skipping
 - Linear ladder drills
- Inversion/eversion strength testing via Kin-Com or handheld dynamometer (8+)
- Progress lower extremity strengthening with emphasis on **single-leg strength of the involved limb**

Phase V: Sport-Specific Training (Weeks 11–14)

- Agility and change-of-direction drills (e.g., 5-cone drill)
- Lateral movement progression (side shuffling, carioca, lateral ladder drills)
- Advanced plyometrics:
 - Higher box jumps
 - Single-leg hopping
 - Hurdles
- Single-leg plyometric drills emphasizing controlled landing
- Sport-specific training and conditioning

Return-to-Sport (RTS) Criteria

- No swelling following activity or running
- Single-leg stance ≥ 30 seconds without loss of balance
- $\geq 90\%$ strength of contralateral limb in inversion/eversion
- Single-leg heel raises $\times 25$ repetitions without pain

Final clearance for return to sport is determined by the physician, typically between 14–16 weeks post-operative, provided all criteria are met.