

Lateral Ankle Reconstruction/Brostrom with Reconstruction/Internal Brace Postoperative Protocol

Postoperative Week 0-2

Goals:

- Protect healing tissue: postoperative posterior splint
- Maintain and progress strength of nonoperative joints (knee, hip, UE)

Treatment:

- Nonweight-bearing with crutch use
- Elevation above the heart “toes above the nose” for edema control
- Pain control:
- NO RANGE OF MOTION (ROM) or STRENGTHENING OF THE OPERATIVE ANKLE
- Upper body strengthening: arm pulley
- Hip strengthening: all planes, open chain
- Knee strengthening: quad sets, SLR
- Core strengthening, isometrics
- Consider UBE for cardiovascular conditioning

Post-Operative Week 2-4

Goals:

- Protect healing tissue
- Progress WBAT with the use of the pneumatic walking boot and crutches as needed
- FWB in the boot at 4-week mark without the use of crutches. Normalized gait
- Continue general strengthening of the LE, UE and core as indicated
- Progress ankle-specific exercises

Treatment:

- Progress to FWB without assistive device with focus on normal gait patterning IN BOOT ONLY.
 - Remove boot for beginning open chain AROM exercises for dorsiflexion and 75% plantar flexion without resistance.
- Modalities to help control/decrease inflammation and pain
- Begin ankle ROM
 - Dorsiflexion
 - Avoid passive inversion and eversion
 - Avoid full-range plantar flexion
- Begin ankle-strengthening exercises
 - Isometrics all directions - submaximal
- Intrinsic foot strengthening: toe curls
- LE, UE, core exercises
- Cardiovascular conditioning: UBE, LE stationary bike with boot on

Post-Operative Weeks 4-8

Goals:

- Protect healing tissues
- Wean out of boot weeks 4-6 and into a shoe with the use of prescribed ankle brace
 - DJO Velocity or BREG CTS™
- Progress ankle strength, ROM and proprioceptive exercises
- Continue general strengthening of LE, UE and trunk as indicated

Treatment: (patient to wear support throughout program)

- Normal gait patterning/training

- Progress to full AROM, all directions
- Add LE closed chain exercises, single plane
- Evaluate LE biomechanics, flexibility and strength bilaterally - identify deficits and areas that would increase long-term stress to reconstruction
- Introduce proprioceptive exercises
 - Double leg → Single leg
 - Even ground only, no BAPS, BOSU or Wobble board
- Light soft-tissue work
- Modalities to control/decrease inflammation/pain
- Cardiovascular training: exercise bike in the boot
 - Increase duration/intensity as tolerated

Postoperative Weeks 8-12

**Use of DJO Velocity or BREG CTS™ ankle brace throughout rehab

Goals:

- Normalized gait
- Jogging/running introduced in brace between weeks 8-10
 - Prerequisites: no walking pain, adequate strength, full ROM
- Plyometric exercises introduced in brace between weeks 10-12
 - Single plane only
 - Prerequisites: pain-free running with proper mechanics
- Full functional ROM of the ankle
- Patient demonstrates fair static and dynamic neuromuscular control

Treatment:

- Progress closed chain exercises
- Progress proprioceptive training
 - Static and dynamic balance progressing to varied surfaces as patient is able
- Progress intrinsic ankle strength with PNF diagonals
- Introduce functional, sport-specific exercises
- Cardiovascular training: Continue exercise bike/elliptical, add treadmill (consider AlterG® if available), stair-stepper.

Post-Operative Weeks 12-16

**Transition from DJO Velocity/BREG CTS to lace-up ankle brace if needed

Goals:

- Patient to demonstrate full strength throughout full ROM
- Patient to demonstrate fully restored static and dynamic neuromuscular control and kinesthetic awareness
- Patient to return to all pre-injury exercise with the exception of full return to sport
- Pass functional testing if returning to sport for final clearance

Treatment:

- Increase intensity of exercise bike, elliptical, stair-stepper and treadmill
- Progress to plyometric program to include dynamic, multiplanar exercises
- Increase intensity and resistance in closed chain activities
- Sport-specific drills
- Multiplanar movements