



REHABILITATION PROTOCOL BROSTOM-GOULD REPAIR FOR CHRONIC LATERAL ANKLE INSTABILITY

GENERAL GUIDELINES / PRECAUTIONS

- Non-weight bearing while in splint for 2 weeks. Attempt to progress to full weight bearing by week 6.
- This protocol, as well as most others, is a general guideline. Patients should not be progressed to the next phase until they demonstrate proper form with all activities and all criteria are met in the current phase.
- When clinically appropriate, properly assess the whole body and incorporate treatment for loss of mobility and stability. Not doing so can prevent optimal outcomes and increase risks of future injuries.

IMMEDIATE POST-OPERATIVE PHASE (Days 1-14)

- **Goals**
 - Protect healing tissue
 - Control pain and swelling
 - Control weight bearing forces
 - Independent transfers and ambulation
- **Precautions**
 - Weight-bearing: NWB with optimal assistive device for 2 weeks.
 - Splint/Brace: Foot is placed into neutral in a short leg cast
- **Exercises:**
 - Transfer and gait training with assistive device, NWB on surgical lower extremity
 - Patient education and independent HEP
 - 4-way SLR

MODERATE PROTECTION PHASE (Days 15-35)

- **Goals:**
 - Minimize quadriceps atrophy
 - Minimize deconditioning
- **Precautions:**
 - No passive range of motion into inversion or plantarflexion of the ankle in order to protect repair.
 - Weight-bearing: TDWB from 2-4 weeks and progress to WBAT with the use of assistive device. Discharge assistive device when gait is normal.
- **Treatment:**
 - Isometrics x 4 directions
 - UBE for aerobic conditioning
 - Stationary bicycle (wearing short leg cast)
 - Modalities as needed

STRENGTHENING AND MOTION PHASE (Weeks 6-12)

- **Goals:**
 - Transition to ankle brace
 - Normal Gait
 - Full DF/PF
 - Symmetrical AROM (Week 10-12)
- **Precautions:**
 - Weight-bearing: FWB without use of assistive device
- **Treatment:**
 - Continue previous exercises as appropriate without brace
 - Aquatic Therapy
 - Deep-water training, gait training, proprioception
 - Ankle AROM – ankle pumps, alphabet, rotations
 - Light 4-way theraband strengthening
 - Proprioception training
 - Seated BAPS board, single leg stance activities
 - CKC exercises
 - Mini-squats, Leg Press/Total Gym, Double Leg Heel-raises, Mini-band walking (forward, backward, lateral)
 - Aerobic Conditioning
 - Elliptical, Stairmaster
 - Treadmill walking progression program at Week 10
 - Scar massage/mobilization

MINIMAL PROTECTION PHASE (Months 3-4)

- **Criteria for entering Advance strengthening**
 - Minimum 4/5 Ankle Manual Muscle Testing
 - Symmetrical pain-free AROM
 - Pain-free ADL activities
- **Goals:**
 - Normal Strength
 - Initiation of Interval Running Program
 - Discharge ankle brace
- **Treatment:**
 - Continue previous exercises as appropriate
 - Aquatic Therapy
 - Aquatic treadmill running program (Month 3)
 - Initiate interval running program as tolerated on treadmill (Month 4)

RETURN TO ACTIVITY PHASE (Months 4-6)

- **Treatment:**
 - Continue previous exercises as appropriate
 - Initiate agility drills / Plyometrics
 - Continue running progression program to track and hard surfaces
 - Transition to home exercise program / gym program

DISCHARGE TESTING / PLANNING (usually done after 6 months post-op)

- Based on a patient's age, gender, and level that they are returning to (i.e. recreational, amateur, professional) a decision is made to endorse their return to sport/ higher level activity or to ask the patient to refrain from doing so. Currently our criterion includes, but is not always limited to the following.
 - Demonstrate quality and symmetrical movement throughout the body evaluated with comprehensive movement screen or assessment process.
 - Symmetrical and acceptable comprehensive scores on CKC LE testing
- Biomechanical assessment of their performance helps safe return to sport / higher level activity. Patient's may be videoed and analyzed doing activities such as running, jumping, hitting or throwing to see if sound body mechanics are being utilized.
- Not all patients who have undergone ankle Brostrom-Gould repair are candidates for functional testing. Those undergoing these tests should be chosen with proper consideration given to what they plan to return to and their general fitness level.
- No matter how well a patient is doing with return to sport testing it is prudent to remember how important time is to full healing and safe return to sport / activity.
- Patients often schedule periodically during this phase to assess their progress and properly change their program until they are deemed safe to return to all activities.