

#### MODIFIED BROSTROM LATERAL LIGAMENT RECONSTRUCTION W/ INTERNAL BRACE

Postoperative Recovery Protocol Jeffrey Seybold, M.D. Twin Cities Orthopedics – Foot and Ankle Surgery

Type of Procedure:	outpatient
Length of Procedure:	1 hour
Anesthesia:	general w/ popliteal or sciatic nerve block

#### Ankle instability: what is it?

While majority of patients who sustain an inversion ankle sprain (foot twists to the inside of the leg) heal and recover without significant consequences, on occasion the lateral or outside ankle ligaments do not scar and heal adequately, leading to chronic instability of the ankle. This often becomes a problem during cutting and twisting sports activities but can also present as a sense of instability even when walking over level ground. In cases where an adequate course of physical therapy or bracing are not enough to restore stability to the ankle, a reconstruction of the ligament(s) is necessary to tighten up the ankle and prevent further episodes of instability.



XR of the ankle demonstrating significant lateral ligament instability.

There are many techniques that can be utilized to reconstruct the lateral ligaments. The most common method is called a modified Brostrom procedure. During this procedure, the ligament tissue is cut along the end of the fibula bone, and is tightened and repaired with sutures, anchors in the bone, or both. Often, an arthroscopic inspection and debridement (or cleanup) of the ankle joint is also performed to address any soft tissue inflammation or cartilage damage in the ankle which may have occurred with the sprain episode(s).

# TWIN CITIES ORTHOPEDICS

New techniques have developed to reinforce the ligament repair and allow for earlier return to weight bearing and activity. For patients who are candidates for this supplemental procedure, the standard ligament repair is completed, but then a strong suture is secured with anchors into the bones around the lateral ankle. This is commonly called a suture brace or Internal Brace. With the suture in place, the ankle is able to progress much more quickly through the rehabilitation protocol as the ligament repair is protected by the suture and not allowed to overstretch.

Specific postoperative course (these are general guidelines, your specific individual postoperative treatment may be different):

# <u>Day 1</u>

- Foot is wrapped in a bulky bandage and boot.
- Ice, elevate, take pain medication.
- Expect numbress in the foot for 12-24 hours then moderate pain.

### <u>Day 3</u>

- Start walking on the foot in the postoperative boot.
- You should be able to progress walking activity and wean from crutches or a knee scooter over the first week or so.
- Moderate pain continue pain medication.
- Ice, elevate as much as possible.
- Remove dressings, but keep the incision clean and dry at all times.
- You should keep the boot on at all times except during dressing changes.

### Week 2

- First clinic postoperative visit and sutures are removed. You may begin to get the ankle wet.
- You may remove the boot for daily hygiene and dressing changes if needed.
- You may also remove the boot multiple times throughout the day to begin working on gentle active range of motion of the ankle in dorsiflexion and plantarflexion (pointing the toes up and down).
- You may use a stationary bike, walk, or use an elliptical trainer while in the boot.
- Continue use of ice, elevation, and over-the-counter medication if needed for swelling or mild discomfort.
- You should still keep the boot on at night.
- Formal physical therapy is initiated

### Week 3

- Progress beyond this point is dictated most by your pain level and under advice of your physical therapist.
- You should be fully weight bearing in the boot by 3 weeks. If comfortable mobilizing in the boot, you may begin to remove the boot and ambulate in a normal shoe. Use the boot when your ankle gets tired or for activities over uneven terrain.

### Week 4

- Continue progressing daily activity outside of the boot in a supportive ankle brace.
- Full active range of motion exercises are allowed (including inversion and eversion).
- May perform low-impact activity (bike, light walking, elliptical, etc.) without the boot.

# TWIN CITIES ORTHOPEDICS

- All activities are guided by pain level. If you experience some aching after activity or at the end of the day that resolves with rest and ice by the next morning, you are safe to continue activity. If you experience pain that persists into the next day, you are pushing activity too quickly.
- Hip and knee ROM and strengthening are encouraged.

# Week 6

- Second postoperative clinic visit.
- Continue progressing full active range of motion exercises, proprioception activities, agility training, and muscle stimulation.
- May completely transition out of the ankle brace with daily activity and low-impact activity.
- Avoid manual mobilization, passive range of motion of the ankle and subtalar joint.
- May progress sporting activity as pain allows and as guided by your therapist. Use the ankle brace at all times with any sporting or impact activities.

# Week 8

- Progress to full ROM, good single leg balance, and near full strength in the operative extremity.
- Continue to utilize the ankle brace with certain athletic activities (cutting, twisting, pivoting).
- Proprioception training (single leg stance on even surface with resistance to arms or the weightbearing leg; double leg stance on wobble board, Sissel, fitter progressing to single leg).
- Strength training (toe raises, lunges, squats).
- May begin manual mobilization of the ankle and hindfoot as needed.

# Week 10

- Goal at this point is to return to full functional work or activity.
- Work or sport specific therapy and training.
- Plyometric training.

### Week 12

- Final postoperative clinic visit.
- Typically return to hopping, skipping, and running by 14+ weeks.
- May wean out of the ankle brace with all sporting activity over the ensuing 1-2 months.

Remember, it may take up to a full year to make a complete recovery, and it is not unusual to have intermittent pain and aching during this time!

You can often find additional information about your procedure or condition on the TCO website at <u>https://www.tcomn.com/physicians/jeffrey-seybold</u> or <u>https://www.tcomn.com/specialties/ankle-care</u>.

Additional information from reputable orthopaedic foot and ankle surgeons affiliated with the American Orthopaedic Foot and Ankle Society can be found at <u>http://www.footcaremd.com</u>.