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## Lesser Toe Correction

### Explanation:

Lesser toe deformities are classified as hammertoes, clawtoes, or mallet toes. These deformities involve contracted joints that are either rigid or flexible. In such deformities, the proximal interphalangeal (PIP) joint contracts and typically results in a painful corn over the joint creating discomfort in footwear. In some cases, a painful callous develops on the tip of the toe. Patients may also report pain under the ball of their foot called metatarsalgia. In severe hammertoes deformities, the shock absorbing fat pad migrates out from underneath the metatarsal head resulting in pain, inflammation, and callous formations about the ball of the foot. Severe deformities can also be associated with dislocations of the metatarsal-phalangeal (MTP) joint. Causes of lesser toe deformities include improper footwear, arthritis, loss of intrinsic muscle function secondary to neuromuscular disease, trauma, or systemic disorders such as rheumatoid or psoriatic arthritis. Lesser toe deformities can also be associated with other forefoot deformities such as bunions or bunions. Non-surgical treatment includes proper shoe selection with a larger toe box, toe splints, and/or orthotics with metatarsal padding for metatarsalgia complaints. If conservative means of treatment fail to alleviate the discomfort, surgical correction of the deformity may be considered.



## Procedure:

The correction of the deformity requires resection of the contracted joint (knuckle) of the involved toe. In advanced cases, tendon lengthening or releases may be necessary. A pin is placed through the toe to stabilize the correction while it heals and scars down. The pin is removed 4 - 6 weeks after surgery. If dislocation of the metatarsal-phalangeal joint (MTP) is present, treatment may require reduction of the joint and the metatarsal to be shortened. This would entail making a cut in the bone called a shortening metatarsal osteotomy (SMO) which is fixated with a small permanent screw. *It is important to note that your toes will be stiff following the procedure; however, patients note that the stiffness does not limit their activities or footwear.*



Pre-Operative



Post-Operative

## **Pre-Operative Considerations:**

All patients will have a pre-operative medical evaluation arranged either through your primary care provider or through pre-admission testing at Froedtert. Anti-inflammatory medications (i.e. ibuprofen, aspirin, plavix, or celebrex) need to be stopped seven days prior to surgery. You will be contacted the day prior to your scheduled procedure regarding the exact time of your procedure and required arrival. Please be punctual. If you are not contacted by 3:00 PM, please call (414) 805-3285 for procedures being done at Froedtert's main OR or (414) 805-9500 for procedures at Sargent Outpatient Surgery Center.

Following surgery you will be unable to place weight on your surgical extremity thus pre-operative planning is essential. Prior to surgery, an appointment with a physical therapist will be made for instructional use of crutches or a walker as their use will be required post-operatively. The device will also be fitted to your height during this appointment. The crutches or walker will be issued at that appointment or arrangements will be made to obtain the device or arrangements will be through a medical supply company approved by your insurance. Some patients may opt to use a Roll-a-bout or wheel chair. These devices can be obtained through your local medical supply store. Please contact with office with the medical supply store of your choice and a prescription can be faxed in. Regardless of the modality used to maintain your non-weight bearing status, please practice in your home prior to surgery as repetition will reduce the risk of falls post-operatively. Removing throw rugs and clearing wider pathways through your home will make navigating with crutches or walker easier and diminish the risk of falls.

During the period when strict elevation is required (the first ten days) you will need help with activities of daily living such as laundry, cooking, and cleaning. Please plan ahead and consider having friends or family stay with you. Driving is contraindicated during the acute post-operative recovery phase and may be prohibited for a longer period of time if your right foot requires immobilization. Showering will also be difficult during the recovery phase as you are unable to place weight on the surgical leg and the cast/dressing needs to be kept clean and dry. Consider the use of a shower chair and hand held shower head. You will need to protect the leg by leaving it outside the shower as well as using bags or a plastic cast sleeve (brochure available in cast room) to ensure dressings remain dry.

## Postoperative Visits

### Day 0-10

- Outpatient procedure: Patients may go home the same day.
- Anesthesia: A regional anesthetic at the level of the ankle (Ankle block) will be administered pre-operatively creating numbness in the foot for intra-operative and post-operative pain control. Intravenous sedation will be administered intra-operatively for relaxation.
- Dressings: Following the procedure, a soft dressing will be applied to the foot. This dressing is to be kept clean, dry and left in place until you return to clinic.
- Non-weightbearing: To ensure optimal surgical results, you will be unable to bear weight on your operative side. The use of crutches or walker is required. Heel weightbearing may be allowed for balance only. Post-operative shoe should be worn for transfers or when patient is out of bed. You are not required to wear the shoe when in bed. Activities are strictly limited during this time.
- Elevation: Strict elevation above heart level (toes above the nose) for the first ten days is important to your recovery as it helps to minimize pain and swelling. Swelling can adversely affect the soft tissue by placing increased tension on incisions putting them at increased risk for dehiscence.
- Pain Control: Pain medications will be prescribed to be used as needed. Pre-Operative nerve blocks can last between 8 to 12 hours; however, waiting to take pain medication until the block has completely worn off can result in increased breakthrough pain which can be difficult to manage. Please plan accordingly and take your medication promptly when sensation begins to return to the foot usually indicated by a tingling sensation in the toes or mild discomfort at the surgical site. Pain medications may be taken on a scheduled basis in the early post-operative recovery phase as this is when the pain is most intense.

### Day 10 – First Post-Operative Visit

- Suture removal if minimal swelling and reapplication of forefoot dressing.
- Allowed heel weightbearing only. Continue with limited activities.
- Applying weight to front of foot will bend pins resulting in difficult pin removal or possibly suboptimal surgical results.

### Week 6

- Pins are removed.
- Can advance weight to front of foot over next two weeks in post-op sandal.
- Once comfortable in sandal may transition into comfortable sneaker.
- Physical Therapy will be instituted to assist in a quicker return to full activities. PT will work to strengthen the foot and improve balance; however, it is important to note that your toes will be stiff indefinitely at the knuckle joint following the procedure.

Lesser toe corrections can be combined with other procedures, such as a bunionectomy. The post-op protocol will be adjusted accordingly.

**Scar Management:** Steri-strips, which were placed over the incision following suture removal, will gradually fall off between week 6-8. Do not pull at these; you may trim the loose edges. Once the Steri-strips have fallen off, you may massage Vitamin E oil or Mederma into the incisions twice a day. Silicone gel strips should also be used in conjunction with the other scar management modalities. These can be obtained from the cast room.

If any questions arise, please contact the office at (414) 805-7442 between 8:00 am and 4:30 pm Monday through Friday. Leave your number and message, Dr. Marks, Jamie, his physician assistant, or Mary S., his nurse, will return your call.