

Post Operative Management for Brachymetatarsia Surgery

Thank you so very much for your assistance in providing post-operative care for our patient who underwent one-stage brachymetatarsia correction surgery approximately 2 weeks ago. This patient has decided to have post-operative care with you instead of returning to my office.

The procedure performed was a gradual intra-operative lengthening of the short metatarsal, a release of the proximal interphalangeal joint contracture and the insertion of an autograft bone from the calcaneus with synthetic bone graft supplement. The surgical site is fixated with a custom made Osteomed Modular Titanium plate and 2.0mm screws.

After the surgery, the patient was placed in either a removable splint or removable cast boot for the purpose of flying home. The patient was instructed to immediately follow up in your office to have a fiberglass cast applied.

Post-operative Management Protocol:

- 1. This surgery is designed for a 10-13 week Non-weight bearing activity in a non-removable fiberglass cast. I recommend a cast change every 3 weeks to check the swelling, incision and circulation. The incision has been closed with 5-0 Monocryl and only requires the Steri-Strip removal and clipping of the ends in approximately 14 days.
- 2. **X-rays** should be taken every 3-4 weeks to confirm, bone alignment, bone healing and patient compliance.
- 3. Discharge to Partial Weight Bearing (about 10-14 weeks)- This is determined by radiographic review of trabeculation across the bone graft site. Evidence of boney callus or dissolution of the graft/bone junction is the primary indicator. Once this is noted then the patient may be converted to a Partial Weight Bearing removable cast boot for then next 1-2 weeks.
- 4. Discharge into regular shoes occurs after the 1-2 week PWB cast boot. Patient may start with a comfortable tie shoe. Affix a Metatarsal Ray cutout made of ¼" felt to the shoe insert/sock liner to decrease the load on the post-surgical metatarsal. Allow the patient to slowly progress to activities that are NOT high impact.
 - a. Patient is allowed to:
 - i. Walk, stand, walk up stairs
 - b. Patient is **NOT ALLOWED** to:
 - i. Jump, climb ladders, perform sporting activities that are high impact.
- 5. **Resumption of high impact activities** usually occurs at 5-6 months after the surgical date based on radiographic findings of complete trabeculation and bone graft integration.
- 6. Post-operative edema is managed by application of Coban/Coflex to the foot and toes.
- 7. **Range of Motion** of the metatarsal phalangeal joint should be performed when the cast comes off. Typically the toe is plantarflexed due to the pull of the stronger flexor muscles. This is normal and with manual range of motion and walking the toe will elevate and loosen in 2-3 months.
- 8. **Incision therapy** is vital to produce minimal scarring. It is recommended that the patient perform *friction* massage to the incision 3 times a day after the fiberglass cast is removed. Some patients, based on the appearance of the scar may opt to apply Silicone sheeting for scars, or may use another scar enhancement preparation.

If you have the capability, could you send a digital photo via email of our patient's progress when they are discharged to regular shoes? I would greatly appreciate it. My email is drlee@leepodiatry.com.

If you have any questions regarding our patient's care please do not hesitate and call me immediately.

Sincerely,

David Lee DPM