

## 1<sup>st</sup> MTP Fusion (Big Toe Fusion)



Arthritic conditions of the great toe present with a variety of complaints- ranging from difficulty with footwear, pain with athletic activities, to pain with activities of daily living. When considering surgical options, our goal is to determine your functional demands and what activities you enjoy and match the most appropriate surgical intervention that will provide long term functional improvement.

Fusion of the great toe is best suited for patients with end stage arthritis of the great toe, deformity (bunion with arthritis), and in patients who place pain relief over motion as their primary concern. Fusions have been associated with very cosmetically unappealing footwear after surgery, concerns for a persistent limp, and a significant decrease in activity level. Our patient's experience and the scientific literature has supported that a fusion is an excellent operation for pain relief and allows for preservation of activity level

and can maintain and even improve the types of shoes a patient is able to wear. A fusion has been evaluated with gait analysis and shown that walking is improved and the weight-bearing forces are restored through the big toe after surgery.

The operation involves an incision along the top of the toe and the spurs are removed. The little remaining cartilage is removed and the joint is prepared to maximize the ability of the body to connect the two bones (phalanx and metatarsal) with new bone, which is what is called a fusion/arthrodesis. In order to provide mechanical stability during this healing process – a combination of screws or a plate and screws are placed across the two bones to minimize motion so that new bone predictably grows. A successful fusion eliminates the joint between the two bones and the pain is significantly improved or eliminated in most cases.

Recovery involves the use of a surgical shoe with a heel wedge that does allow for immediate weight bearing after surgery. Six weeks after surgery, transition to a flat surgical shoe or even rigid gym shoes is allowed based on swelling. Return to more fashionable shoes is considered after 3 months and after xrays confirm a solid fusion. Complete resolution of swelling can take up to 6 months with limitation of activity and footwear based only on patient comfort. With appropriate shoes, patients are able to hike, jog, play tennis and even run.