Does The Pain of Hammertoes Limit More Than Your Shoe Choices?

Now There’s An Easy Solution.

MiToe
Beauty and Comfort Restored™
If you’re like many women, the problem of hammertoes goes beyond your wardrobe frustrations.

You may be muddling through daily life in pain or skipping activities you once loved. Perhaps the photo of the trek across the airport (above) has you thinking about adding an extra layer of padding to your shoes?

In your heart you may know it is time to take action, but you’re just too busy to take time off for surgery and recovery. Plus, you’ve heard about the traditional wire treatment that may require restrictions on activities like driving, limitations of shoewear or risks of infection. All these hassles, plus the possibility that the hammertoe can come back, probably make you think, “Never mind, I’ll just suffer through the pain.”*
There is no reason to delay hammertoe surgery any longer. MiToe™ implants are designed to correct your hammertoe – reducing the associated pain and improving the appearance of your feet. Depending on your doctor’s advice, you may be back to many of your usual daily activities within a few weeks.

There will be some normal post-surgical bandages and restrictions, but after healing, the goal is a natural-looking toe that restores function without the pain.

Don’t let hammertoes cramp your style.

Mi Toe™.
Mi Solution from pain.
How can little toes mean big problems?

Tell someone your toes hurt and watch them tune out. Face it, people who don’t have hammertoes cannot comprehend how debilitating it is.

Your toes play an important role in balancing your body while walking or standing still. They bend and straighten to effectively grip the ground and push your feet forward.

Hammertoes, as you probably know, occur when one or more toes remain bent or curled, causing an unnatural appearance. These crooked toes drastically change the shape of your foot, causing pain which is often worsened by shoewear. This makes walking, jogging, or simply standing difficult.
What causes hammertoes?

Foot problems, such as hammertoes, often develop in early adulthood and worsen with aging. There are many contributing factors, some of which you cannot help:

- Heredity
- Toe muscle or tendon imbalance
- Prior trauma, such as a broken toe
- Arthritis
- Excessive pronation (inward rolling) of the foot
- Excessive flattening of the foot
- Tight calf muscles and a very high arch

However, women are more affected by hammertoes because their shoes, which can look oh-so-good when worn, cause the toes to be in an unnatural, bent position. This is worsened by:

- Wearing tight, poorly fitting shoes, especially high-heeled and pointed shoes
- Excessive use of open-back/strapless shoes, requiring toes to grab
- Wearing shoes that gradually squeeze the foot bones into an unnatural shape

While there are non-surgical treatments, such as splints and padding, in the early stages of the condition, the toe eventually becomes so painful and rigid that the only option is surgical correction of the toe. If you are investigating the MiToe™ solution, chances are you have reached this point and must speak to your doctor.
How will my doctor assess my toes?

During your first office visit, your doctor will want to determine the underlying cause of your foot problems, confirming that it is or is not hammertoes. He or she may do this by:

• Assessing the frequency and intensity of the pain associated with your hammertoes
• Examining how far and how smoothly the affected joint moves
• Watching how your feet rotate and flatten as you walk
• X-raying to check for bone problems or to rule out other causes of pain and swelling.
• Conducting blood tests or arthrocentesis (removal of fluid from a joint to test for existing problems such as gout, rheumatoid arthritis, or joint infection.)

With this information, your surgeon will ask about your goals for treatment, and help guide you in determining the best treatment options specifically for you.
What are my treatment options?

Depending on several factors, such as the presence or severity of pain, your surgeon may simply recommend a change in footwear, padding for your corns and calluses, splinting, or he/she may prescribe custom-made shoe inserts to correct your foot mechanics. Additionally, medication may be prescribed to control the pain associated with hammertoes.

However, when medications and shoe modifications fail to control the problem, your surgeon may recommend surgery. Surgery is often a last resort measure, but it can provide significant relief by addressing the cause of hammertoes. Only your surgeon will know when surgery is the best option for you.

If your pain is severe, your doctor may recommend foot surgery.

Your doctor may recommend padding for your footwear.
When your pain is severe and conservative treatments fail to correct your hammertoe, your surgeon may determine that surgery is your best treatment option. Every patient is different, and there is no “best” surgical treatment for everyone. Instead, your doctor may “mix-and-match” several common surgical procedures to specifically tailor the treatment to best correct your hammertoes. There are many surgical options, and each procedure accomplishes a slightly different result, but some of the most common types of hammertoe surgical treatments include:

**Resection** – Removal and reshaping of bone from the PIP (proximal interphalangeal) joint.

- As the PIP joint is often the main culprit of hammertoes, this procedure allows the surgeon to remove the rigid bony build up at the PIP joint that prevented the toe from straightening.

**Arthrodesis** – Fusion of the PIP joint to minimize motion and pain.

- To prevent the PIP joint from returning to its crooked appearance, the PIP joint is often positioned so that bone will fill the joint. This permanently restricts the hammertoe from reappearing, and eases pain associated with the deformity.
- Your toe is unique, in that it can be fused with minimal impact to your everyday activities, unlike other joints like your knees, shoulders and fingers. In fact, you may not even notice any difference in function compared with your normal toes.

**Tendon transfer** – The tendon that flexes your toe is re-routed from under your toe to the top, so that it pulls your toe down into proper alignment.

- The bend at the PIP joint in your hammertoe is often caused by an unbalanced tendon that has begun pulling your toe in an unnatural position. Over time,
this unbalanced state may become permanent, and your surgeon will have to move the tendon into a more balanced position through a tendon transfer.

**Tendon lengthening/capsule release** – The tendons that pull the toe up and/or down may be partially cut to relax and straighten the toe.

- When surgery is required, the tissue around your hammertoe has begun to act as if the deformed position is normal, creating a very rigid and painful toe. To restore alignment and ease the tension on the PIP joint, this tissue may need to be trimmed through some very minor cuts of the capsule that surrounds your joint.

**Metatarsal shortening** – A portion of the long bone near the base of the toe is removed, giving the toe more space to extend itself.

- Most shoe manufacturers design their shoes to accommodate a “normal” waterfall appearance of the toes, with the big toe being the longest, and each smaller toe being slightly shorter. However, everyone is different, and not all toes match this appearance. In fact, hammertoes are often created when a toe that is naturally longer than the surrounding toes is shoved into a shoe with a restrictive toe box, causing it to buckle.
- Over time, this longer toe permanently maintains this crooked appearance, becoming a rigid and painful hammertoe.
- Metatarsal shortening corrects this underlying cause of hammertoes by shortening the problematic longer toe, thereby allowing your foot to better accommodate most footwear.

Many of these procedures require the implantation of a variety of orthopaedic products to make sure the procedure works. Your surgeon may select from a variety of products, from pins to screws or an assortment of implants which ensures joint fixation and stabilization. As with surgical procedures, there is no “best” product for every patient.
PRO-TOE® VO Hammertoe Fixation System

PHALINX™ Hammertoe System

TENFUSE® PIP Sterile Bone Matrix
Mi Toe™. Mi Benefits.

Depending on your specific condition, your surgeon may recommend MiToe™ implants for several reasons that will benefit you.

Lasting Solution
Hammertoes can recur, especially if the bones in the toe were not able to fully heal.* As an alternative to traditional treatments, the MiToe™ implants are implanted within the bone and remain there, within the toe to help maintain the correction.

More Comfortable
The internal designs of the MiToe™ implants eliminate the discomfort and inconvenience of exposed and protruding wires commonly associated with traditional hammertoe treatments.

Fewer Complications
Ordinary hammertoe procedures often use exposed wires which extend outside the end of toes for 4-6 weeks. Common problems associated with wires include infection where the wires come out of the toe, breakage, pain from hitting the wire, and lack of rotational stability causing the toe to look crooked. In addition, wires require a second in-office procedure to remove them, which can cause a lot of anxiety for many patients.

Once inserted, MiToe™ implants remain within the bone, correcting the pain and deformity of hammertoes while eliminating many of the complications specific traditional treatments.

Simple Recovery
Any surgery requires a period of healing and rehabilitation. However, by eliminating many of the complications and hassles associated with wires, the MiToe™ implants are designed to simplify your recovery to get you back on your feet quickly.

As with any surgical procedure, there are risks associated with foot surgery that you should discuss with your surgeon. These potential risks and complications with products used to treat hammertoes include implant breakage, infection at the incision site, pain, inflammation and swelling at implant site, allergic reaction to implant material(s), loosening or dislocation of implant resulting in revision surgery, deterioration or loss of bone, over-production of bone, blood vessel blockage, and negative bodily response due to implant rejection and/or implant wear debris.

In addition, your weight, age, and medical history determine your specific risks and your results.

Ask your doctor if foot surgery is right for you.

Tell your doctor if you have diabetes or have been diagnosed with bone loss or weak bones. Also, tell your doctor about all other treatments you have had to fix your toes, even if they were done a long time ago.
What can I expect after surgery?

Hammertoe surgery can both reduce pain and improve the function and appearance of your toe. Your surgeon will create a recovery specific to you and your surgery, so post-operative routines may differ. For best results, see your doctor as scheduled and follow all recovery instructions carefully.

While MiToe™ implants were designed to eliminate many of the hassles and complications of traditional surgery, there will be a recovery period that will allow your foot to heal. During this time, your activity and shoewear may be restricted, providing the best opportunity for the bone and tissue to rebuild your toe into a normal alignment. This rebuilding and healing may occur over the course of several weeks and months. However, the restrictions are often limited to the first few weeks after surgery, when the toe is most sensitive to disruptions.

Typical limitations involve bandaging and shoewear immediately after surgery, lasting only a few weeks:

- Immediately after surgery, your foot will be bandaged until the incisions heal, typically one to two weeks.
- If soft tissues were shifted during surgery, you may be given a splint to limit foot movement for a while. In such cases, the majority of healing should occur within a few weeks.
- Depending on other procedures performed, your foot may be placed in a surgical shoe, boot or cast for several weeks.
- Also, it is possible that you may experience problems with healing due to infection which may require additional surgery to remove the implant.

Your doctor can also tell you of any pain medications, wound care, and rehabilitation routines to get you back on your feet and living life faster.
MiToe™ implants are manufactured by Wright Medical, the recognized leader of surgical solutions for foot and ankle. Wright has been in business for more than 60 years and markets products in over 60 countries, worldwide.

For more information about Wright, we invite you to visit our website at www.wmt.com.