

## What is Metatarsalgia?

Metatarsalgia is pressure pain in the ball of the foot. This occurs because of an abnormal distribution of weight bearing under the ball (metatarsal heads) of the forefoot.

## Causes

There are many factors that alone or together can lead to Metatarsalgia.

- Deformities of the foot (Bunions, Hammer toes, healed fractures, etc.) can cause an uneven distribution of weight across the bottom of the forefoot (or metatarsal heads).
- Aging may cause the arch across the forefoot to collapse. When this occurs, the metatarsal heads become more prominent on the bottom of the foot causing increased pressure and painful calluses.
- Loss of the normal fat padding under the metatarsal heads also increases the pressure in this area.
- High heels or shoes with thin hard soles can transfer more weight to the metatarsal heads that can then lead to calluses and pain.
- Walking and standing on hard floors will put added pressure on the foot.



## Treatment

The care of Metatarsalgia must be tailored to the cause of the symptoms and designed to decrease the pressure on the ball (metatarsal heads) of the foot.

- Shoes with low heels, a roomy toe box and thick, soft soles will relieve some pressure on the forefoot.
- A shoe insert (metatarsal pad or orthotic) may be put inside the shoe to take pressure off of the callused area.
- If necessary, a metatarsal bar or rocker bottom sole may be prescribed. The purpose is to decrease the weight bearing on the metatarsal heads.
- Calluses on the ball of the forefoot are a result of the increased pressure from the metatarsal heads. Decreasing the size of the calluses can improve comfort. To do this, use a pumice stone after bathing to sand down the callus, when it is soft. Wet the stone, and then use a gentle, circular motion over the callus. Crisco or another lotion can be used to keep the callus soft and prevent cracking. Do not use acids, over-the-counter preparations, or sharp instruments to remove calluses without your doctor's order and supervision. The most important thing to remember about calluses, is that the pressure causing them must be removed.
- If you cannot manage the calluses yourself it can be trimmed professionally every 3-4 months or as often as needed. Between visits the area can be safely cared for at home. Dr. Michael McManus can perform this service for you here at Orthopaedics Northeast (ONE).
- If pain continues, surgery may be suggested to correct the underlying deformity. This may involve cutting the metatarsal bone to elevate or shorten it thereby relieving pressure on the ball of the foot. Surgery is done on an outpatient basis and often under local anesthesia.