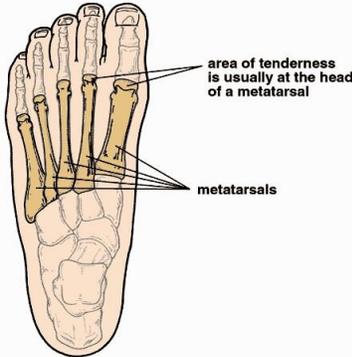


# Metatarsalgia

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Metatarsalgia is a general term used to denote a painful foot condition in the metatarsal region of the foot (the area just before the toes, more commonly referred to as the ball-of-the-foot). This is a very common foot disorder that we see in our practice. It can affect the bones and joints at the ball-of-the-foot. Metatarsalgia (ball-offoot-pain) is often located under the 2nd,

3rd, and 4th metatarsal heads, or more isolated at the first metatarsal head (near the big toe). The most common location is just the second metatarsal head. The main symptom of metatarsalgia is pain in the ball of your foot — the part of the sole just behind your toes. The pain may be sharp, aching or burning, and you may feel it in the area around the second, third and fourth toes or only near your big toe.

Other symptoms of metatarsalgia include:

- Pain that gets worse when you stand, walk or run and that improves when you rest
- Sharp or shooting pain in your toes
- Numbness or tingling in your toes
- Pain that worsens when you flex your feet
- A feeling in your feet as if you're walking on pebbles or have a bruise from a stone

- Increased pain when you're walking barefoot, especially on a hard surface

Sometimes these symptoms come on suddenly, especially if you've recently increased your usual amount of running, jumping or other high-impact exercise, but problems are more likely to develop over a period of months



With this common foot condition, one or more of the metatarsal heads become painful and/or inflamed, usually due to excessive pressure over a long period of time. It is common to experience acute, recurrent, or chronic pain with metatarsalgia. The most common complaint we hear all the time is that it feels like walking on a small rock in the shoe. This happens when the capsule around the joint gets inflamed and swollen and we walk on it.

Anything that puts pressure or extra stress on the ball of our foot can cause this condition. These include:

- Being overweight
- Wearing high heeled shoes
- Digital deformities that create retrograde pressure on the metatarsal head
- Extremely high arched feet
- An orthopedic condition where a metatarsal is very long or declinated
- Anterior ankle arthritis where the foot can not be brought up into the ankle joint

- Bunion deformities where big toe is weakened and extra stress is put on ball of foot
- Athletics where there is high impact on the fore foot
- Aging where the normal fat pad on the bottom of the foot gets thinner

The first step in treating metatarsalgia is to determine the cause of the pain. If it is something obvious like improper fitting footwear, the footwear must be changed. Footwear designed with a high, wide toe box (toe area) and a rocker sole is ideal for treating metatarsalgia. The high, wide toe box allows the foot to spread out while the rocker sole reduces stress on the ball-of-the-foot. One must rule out a stress fracture if the pain does not seem to be getting better.

Unloading pressure to the ball-of-the-foot can be accomplished with a variety of footcare products. **Orthotics** designed to relieve ball-of-foot pain usually feature a metatarsal pad or a cut out under the affected metatarsal. The orthotic is constructed with the pad placed behind the ball-of-the-foot to relieve pressure and redistribute weight from the painful area to more tolerant areas. Other products often recommended include gel metatarsal cushions and metatarsal bandages.

Once we have something in the shoe to try to prevent the excessive pressure and continual injury then other modalities can be used concurrently. These include OTC medications like Motrin or Aleve.

Sometimes a visit to the podiatrist is indicated. X-rays can show if there is an orthopedic condition causing the pain. They also show us if the joint has gone through any changes. For the more painful joints sometimes a small steroid injection can give relief. Most of the time (90%) conservative care can give good long lasting relief. For the occasional chronic condition that

doesn't get better with conservative care and is painful everyday,  
there are some surgical options that are very successful.