

# Metatarsalgia

Metatarsalgia is a condition that is marked by inflammation and pain in the ball of the foot. You might experience this condition if you participate in activities involving jumping and running or you are physically active. You might also develop this condition if you wear shoes that don't fit properly. Other causes of the condition exist as well.

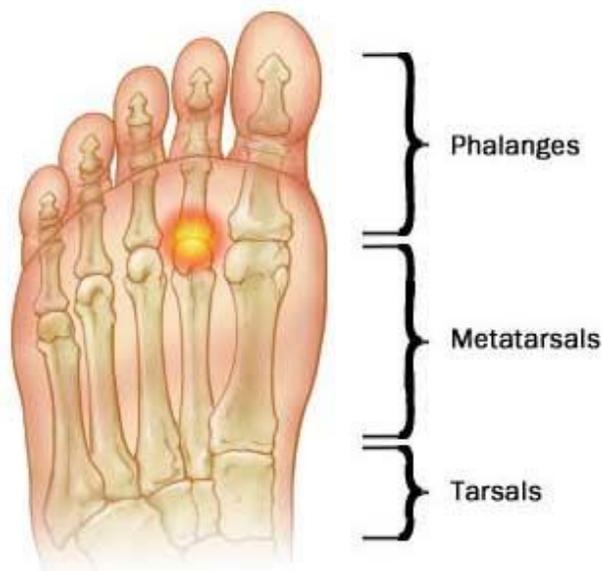
Even though the condition often isn't serious, it can sideline you. Thanks to conservative treatment options, you can help relieve the symptoms associated with the condition. Proper footwear with arch supports or shock-absorbing insoles might be all that is needed to prevent or minimize problems down the line with metatarsalgia

Long distance runner can suffer this problem, and it can mimic bone bruising or metatarsal stress fracture.

## Metatarsalgia Anatomy

In each one of the feet, you have five metatarsal bones running from the toe joints to the arch. The first metatarsal is a lot shorter and thicker than the other bones, which are often similar in size. During the push-off phase when walking, running or jumping, the body weight is transferred to the metatarsals and toes. The first and second of the metatarsals take the majority of the force.

Most problems with the metatarsals develop when there is something that changes with the way the foot works normally, thus affecting how the weight is distributed. This places excess pressure on the metatarsals in the foot, which leads to pain and inflammation, especially in the heads of the metatarsals, which are the rounded ends of the bones connecting with the toe bones.



## How to Treat Metatarsalgia:

### 1. Anti-Inflammatory Medication

An anti-inflammatory medication can help to reduce inflammation and pain. This is useful in the short term, but not so much use in the long term, and some people report mixed results with anti-inflammatories/NSAIDs.

### 2. Wear Proper Fitting Shoes

Wearing shoes that are specifically fitted for your shoe type, sport and stride is important. Make sure running shoes are broken in carefully. Check the mileage on your shoes under the manufacturer's guidance as they might have a shelf-life after a few hundred miles.

### 3. Shock-Absorbing Insoles

These shoe inserts, which are composed of cork, rubber, plastic or a gel-like substance, fit nicely on the inside of your shoes to help cushion shock.

### 4. Metatarsal Pads

These pads are placed on the inside of the shoes just ahead of where the metatarsal bone is to deflect stress from the afflicted area.

### 5. Rest

Protect the foot from additional injury by avoiding any additional stress on it. You might have to avoid your favorite sport or activity for a bit, but you can partake in low-impact exercises. Continue to stretch and strength train as your pain allows.

## Tips:

- Runners are at an increased rate of contracting this condition because of the significant amount of force placed on the foot when running.
- High arches place added pressure on the metatarsal, as well as having a second toe that is longer than the big toe.
- Hammertoe develops when you wear shoes that are too small, which causes a toe to curl downward from a bend in the middle joint, thus depressing the metatarsal heads.
- Since the majority of your body weight is transferred to the forefoot when moving, additional weight can mean added pressure on the metatarsals.
- High heels, which transfer additional weight onto the front of the foot, are one of the main causes of this condition in women. Athletic shoes without proper support and padding also cause problems with the metatarsals.
- Discuss with your RMP therapist about applying ice as it can reduce inflammation.