### **Everything you need to know about metatarsalgia**



# METATARSALGIA

If you participate in activities that involve running and jumping, you can get a condition in which the ball of your foot becomes painful and inflamed. This is called metatarsalgia. It is also caused by foot deformities and shoes that are ill-fitting.

Symptoms of metatarsalgia can include sharp, aching, or burning pain in the ball of your foot, pain that worsens when you stand, run, flex your feet or walk, sharp or shooting pain, numbness, or tingling in your toes, or the feeling of having a pebble in your shoe.

Metatarsalgia is the pain and inflammation caused by injury to the ball of the foot. Although metatarsalgia is thought of as a symptom of other conditions rather than a specific disease, it is still considered a common overuse injury.

## ANATOMY & DESCRIPTION

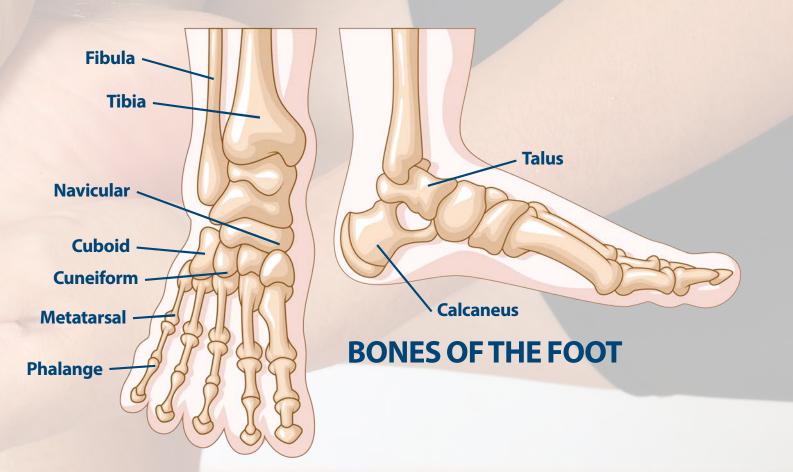
#### **ANATOMY**

Metatarsalgia, a forefoot injury, can occur in anyone, though athletes who participate in intense sports involving running or jumping are at the highest risk. Metatarsalgia occurs when there is intense or unusual pressure on the ball of the foot, creating pain and inflammation.

### DESCRIPTION

Metatarsalgia can be caused by injury during a sport or physical activity. If there is an abnormal weight distribution or unusual movement, the foot is more susceptible. Metatarsalgia pain generally occurs over time rather than immediately and can last several months with increasing severity.





# METATARSALGIA SYMPTOMS

Symptoms of metatarsalgia include irritation and inflammation of the ball of the foot and pain at the end of one or more of the metatarsal bones. The factors that contribute to metatarsalgia can include:

- •Tight toe muscles.
- •Weak toe muscles.
- •Hypermobile first foot bone (when joints move easily beyond the normal range expected for that particular joint).
- •Tight Achilles tendon.
- •Loose or tight footwear.
- •High or unusual levels of physical activity.
- •Hammertoe deformity.
- •Excessive side-to-side movements when walking.

Also, some medical conditions may predispose individuals to metatarsalgia problems. These can include:

•A high arch.

•Hammertoe deformity.

•A short first metatarsal bone or a long second metatarsal bone.

Pain is usually aggravated when walking or running. Athletes who have inflammatory conditions such as bursitis often also have forefoot pain.



### METATARSALGIA DIAGNOSIS

Your Florida Orthopaedic Institute physician will evaluate your symptoms and examine your foot. From there, they will assist you in assessing which treatment options are best.

Various tests can help pinpoint inflammation and damage and help identify conditions that could be causing metatarsalgia, such as bursitis or Morton's neuroma.

Your physician may also determine that an MRI scan (magnetic resonance imaging) is the best option to detect and diagnose any disorders or conditions that result from any biomechanical imbalance.



# METATARSALGIA TREATMENT

Fortunately, metatarsalgia can be treated in most cases by rehabilitation and does not need any surgical intervention. Your physician will help you determine which course of treatment and rehabilitation practices are right for you.

### NONSURGICAL TREATMENT

Icing the foot and applying a pressure bandage can help start the healing process. Your physician may also recommend not standing on the foot for a few days while it gets adjusted to the pressure bandage.

Rehabilitation can assist in getting back on your feet quicker by restoring the range of motion. Recreational therapy such as swimming can be a good alternative to normal weight-bearing sports. Supportive shoes should be worn and are also an effective treatment for metatarsalgia.

It is important to not disrupt the healing process by following your physician's orders - stretching correctly and not returning to physical activity until given the go-ahead to do so.

### SURGICAL TREATMENTS

In extreme cases, surgery may be recommended to treat metatarsalgia. If severe pain and inflammation do not subside, surgical realignment of the metatarsal bones may be required. Your Florida Orthopaedic Institute physician will evaluate your treatment progress and discuss any additional surgical procedures that they feel are needed.





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