Orthotics4U.com | Dr. Milton J. Stern, DPM
Patient Education

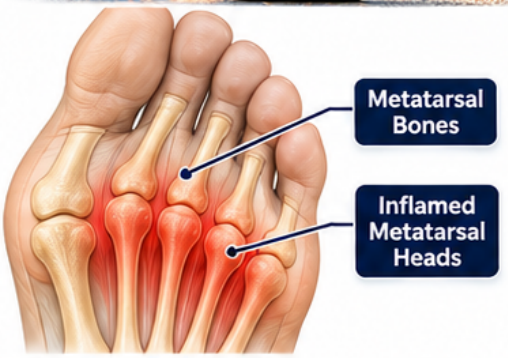
METATARSALGIA

Causes, Symptoms, Treatment & the Role of Orthotics



What Is Metatarsalgia?

Metatarsalgia is a common and often painful condition that causes pain and inflammation in the ball of the foot, at the heads of the metatarsal bones. It results from increased pressure and stress on this area.



Common Symptoms

- Pain or aching in the ball of the foot
- A feeling of walking on a pebble
- Increased pain with standing, walking, or running
- Callus (thickened skin) under the metatarsal heads
- Sometimes numbness or burning in the toes



What Causes It?

Metatarsalgia can be caused by a variety of factors, including:

- **Excessive pressure or overuse** (e.g., running, jumping, or prolonged standing)
- **Foot structure problems** (such as a high arch, flatfoot, or long second toe)
- **Improper footwear** (narrow, tight, or high-heeled shoes)
- **Aging and loss of natural cushioning** under the ball of the foot
- **Increased weight or repetitive stress** on the forefoot

Who Is at Risk?

- Runners and athletes
- People who wear high heels or narrow shoes
- Individuals with foot biomechanical abnormalities (high arches or flat feet)

Possible Complications

If not treated, metatarsalgia can lead to persistent pain, calluses, bursitis (inflammation of a bursa), or increased risk of stress fractures in the metatarsal bones.

Treatment Options

Treatment depends on the cause and severity of your symptoms and may include:

- **Activity modification** – reduce high-impact or repetitive activities.
- **Proper footwear** – shoes with a wide toe box and good cushioning.
- **Padding or metatarsal pads** – to offload pressure from the sore area.
- **Anti-inflammatory medication** – to reduce pain and swelling (as recommended by your doctor).
- **Custom orthotics** – to correct foot mechanics and redistribute pressure.



Custom Orthotic with Metatarsal Support

How Orthotics Help

- **Redistribute weight** and **reduce pressure** on the metatarsal heads.
- **Provide cushioning** and **shock absorption** in the ball of the foot.
- **Correct underlying biomechanical issues** (such as high arches or pronation).
- **Reduce pain** and **inflammation**.
- **Allow you to stay active comfortably** and help prevent recurrence.