

Forefoot Pain

Metatarsalgia

Metatarsalgia is a term used to describe a group of forefoot conditions that cause pain, burning or discomfort under the ball of the foot or in the metatarsal bones. Each foot has five metatarsal bones that run from the arch of your foot to your toe joints.

SYMPTOMS

- Pain and/or burning sensation in the ball of your foot when standing, walking or running - which improves upon resting
- Sharp or shooting pain in your toes, and
- Numbness or tingling in your toes.



CAUSES

- Intense activities
- Foot trauma
- Certain foot types such as high arches
- Foot deformities
- Arthritis
- Fat pad deterioration (a thinning of the protective fat pads that cushion the balls of the foot)
- Bunions
- Excessive weight
- Improper fitting footwear

COMMON FOREFOOT CONDITIONS

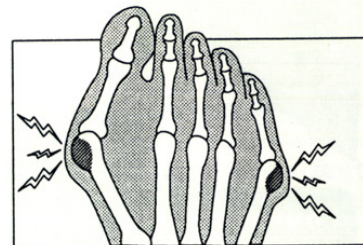
Examples of common types of painful forefoot conditions include:

Bunion / Bunionette

A bunion is a bony enlargement or bump located on the side of the big toe joint. This area is often irritated and made more painful by tight fitting shoes causing pressure and friction on the area. A bunionette is an enlargement of the baby toe joint.

Symptoms:

- The bunion or bunionette will often be red, swollen and painful
- Often a bunion may also have a corresponding shift of the big toe toward the smaller toes. This is called hallux valgus. The 2nd toe may rest over the big toe.



Hallux Valgus Deformity

This is a shift of the big toe toward the smaller toes. It is often improperly identified as a bunion, but frequently co-exists with a bunion.

Symptoms:

- Not always symptomatic, but pain is often present with forced movement of the big toe joint
- The 2nd toe often overrides the big toe (called crossover toe deformity) as the big toe shifts under the 2nd toe

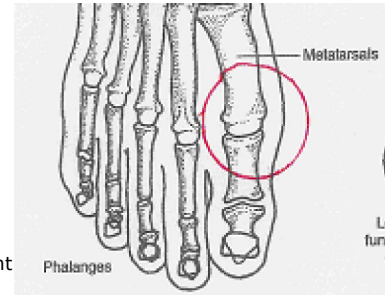
Hallux Limitus (HL) / Hallux Rigidus (HR)

Hallux limitus is limited or reduced motion in the big toe joint possibly due to bony changes in the joint.

Hallux rigidus occurs when the big toe joint motion ceases to occur as arthritic changes have caused pronounced degeneration of the joint.

Symptoms:

- General enlargement of the big toe joint that is tender along the top of the joint line
- Pain is aggravated with increased weight-bearing activity
- A bony prominence on top of the big toe joint (called an osteophyte) may be seen on examination
- Pain during walking, especially as the foot pushes off



Morton's Neuroma (interdigital neuroma)

A Morton's Neuroma develops in response to irritation, pressure or injury to one of the nerves that lead to the toes. A neuroma is most often found between the 3rd and 4th toes but can also occur between the 2nd and 3rd

Symptoms:

- Pain, tingling, burning, and/or numbness is reported beginning at the ball of the foot and often radiating into the toes
- Tenderness is found in the web space between the toes and there may be a palpable click when squeezing the metatarsals (long bones of the forefoot) together.



LESS COMMON FOREFOOT CONDITIONS

Metatarsal Phalangeal Joint Capsulitis

This refers to a local inflammation under the metatarsal head (ball of the foot) sometimes due to degeneration of the ligaments that stabilize the metatarsal head.

Metatarsal Stress Fractures (march fractures)

A Stress fracture is a small break in the bone caused by repetitive stress.

Freiberg's Disease

This condition occurs from a lack of blood supply (avascular), which results in permanent damage to the bone tissue at the 2nd metatarsal head. The avascularity leads to eventual collapse and deformity of the metatarsal head.

PEDORTHIC TREATMENT

- Foot and lower limb exam
- Custom-made foot orthotic or over-the-counter device
- Recommendation of appropriate and proper-fitting footwear
- Modification of Footwear

If you are experiencing foot pain or discomfort, you should consult your physician for a proper diagnosis and an appropriate treatment plan. Your doctor may refer you to a Canadian Certified Pedorthist for pedorthic management including orthopaedic footwear, shoe selection guidance and orthotics.