

**DEFINITION**

1. Metatarsalgia is defined as pain about the distal end of the forefoot at the metatarso-phalangeal junctions. It is, consequently, a symptom and not a disease process in its own right.

**CLINICAL MANIFESTATIONS**

2. The characteristic feature is pain in the forefoot on weight bearing which is usually relieved by rest although it can in severe cases persist throughout the night. Other clinical features depend on the cause of the metatarsalgia and may include deformity of the forefoot, bony and soft tissue swellings, local tenderness, and oedema.

**AETIOLOGY**

3. **Stretching of the ligaments** of the forefoot due to congenital laxity can result in a **flatfoot** and **splayfoot**. Acquired stretching of the ligaments can occur as a result of prolonged standing, obesity, ageing and following acute illness.
4. **Muscular weakness of the intrinsic foot muscles**, most commonly due to poliomyelitis, gives rise to deformity of the foot and subsequent metatarsalgia.
5. **Arthritis** affecting the metatarsal-phalangeal joints gives rise to pain. Degenerative arthritis usually favours the first metatarsal-phalangeal joint but rheumatoid arthritis may affect multiple joints in the forefoot.
6. **Direct trauma** such as dropping a heavy object on the foot may cause contusions of the metatarsal heads or fractures. Prolonged walking can cause a strain of the transverse metatarsal ligament, and a narrow shoe can compress the metatarsal heads together causing an intermetatarsal bursitis.
7. Any **deformity of the foot** changing the axis of the metatarsal arch can give rise to metatarsalgia.
8. **Plantar digital neuroma** gives rise to the syndrome known as Morton's Metatarsalgia. The development of a neuroma in a digital nerve is associated with severe neuralgic pain in the distal sole referred to the toes.
9. **Stress (or march) fractures** of a metatarsal bone are not rare and can be overlooked. They are analogous to fatigue fractures of metals. Often a specific history of trauma is not obtained but these fractures usually occur in relation to repeated stress as in unaccustomed walking or marching.
10. **Gout, circulatory impairment, infections** and **neuritis** may also be causal factors.

**CONCLUSION**

11. **Metatarsalgia** is a symptom which may result from many conditions which are listed and discussed above.

## REFERENCES

Turek Samuel L. Orthopaedics. Principles and Their Application. 4<sup>th</sup> Ed. Vol 2. 1984. Philadelphia. J B Lippincott Company. p1436-1437.

Adams John Crawford and Hamblen David L. Outline of Orthopaedics. 11<sup>th</sup> Ed. 1990. Edinburgh. Churchill Livingstone. p378-380.

December 1992