

MRI of the Foot

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Abstract:

Introduction:

The difficult anatomy of the foot with small structures bones, ligaments and tendons and its complex biomechanics relationships, together with technical limitations of the MRI delayed the use of MRI of the foot comparing with other joint evaluation. Many disorders produce forefoot pain and metatarsalgia and MR frequently allows specific diagnosis based on the location, signal intensity characteristics and morphological changes.

The objective of the lecture will be:

1. To provide an update on MRI protocols
2. To describe forefoot anatomy bones, ligaments, tendons with emphasis on metatarsal-phalangeal complex
3. To overview the role of radiologist in different clinical scenarios, giving some important radiological key points

The lecture will be divided into these different topics:

1. MRI Technique
2. Bone injuries
 1. Stress fractures
 2. Avascular necrosis
3. Lisfrank complex
4. Rheumatoid arthritis
5. First metatarsophalangeal joint
6. Lesser metatarsophalangeal joints. Plantar plate complex
7. Soft tissue masses
 1. Ganglia
 2. Morton neuroma
 3. Calluses
 4. Plantar fibromatosis
 5. Giant cell tumour
 6. Hemangioma
 7. Gout
8. Diabetic foot: how accurate are we distinguishing neuropathic foot and infection