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INTERMETATARSAL BURSITIS: CASE REPORT

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INTRODUCTION

Bursae are virtual spaces which in the physiological state do not contain synovial fluid. The appearance of synovial fluid in the bursa is a sign of a mechanical or inflammatory reaction.

Inter-capito-metatarsal bursopathies are frequently found in rheumatoid arthritis (RA).

Metatarsalgia is the main symptom, often with a sensation of a "stone in the shoe". The diagnosis is confirmed by ultrasound and magnetic resonance imaging (MRI).

KEYWORDS: Metatarsalgia; Bursitis; Intermetatarsal; MRI.

Ultrasound showed a small anechoic collection involving an interdigital space with no underlying plantar nerve abnormality. MRI shows an interdigital "hourglass" collection, in T1 hyposignal and T2 hypersignal / DP FAT SAT, extending to the sole of the foot (Fig 1 and 2).

In superinfected forms, there is peripheral enhancement after injection of gadolinium (Fig. 3).

The differential diagnosis is Morton's neuroma, which is clinically suggestive: inter-capito-metatarsal

radiating along the adjacent toes leading to sensitivity disorders in booklet form.

MRI is then very useful to distinguish a neuroma, with intermediate T2 signal, from a bursitis, with clear T2 hypersignal.[1]

The treatment is usually conservative, combining rest with a foot orthosis (to ensure a retro-capital support to spread the bursa) and a local treatment with corticosteroid infiltration. If this fails, the bursa can be surgically removed.



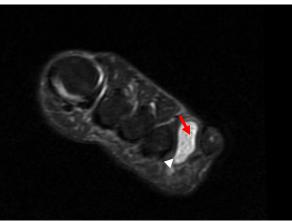


Figure 1: MRI of the foot in a 35-year-old female patient presenting with forefoot pain centred on the 4th interdigital space after intensive walking. Axial sections, T1-weighted (a) and T2-weighted (b) with fat saturation, showing a small collection in the 4th space, in T1 hyposignal (=>) and T2 hypersignal (=>). Note the passage of the collection to the sole of the foot (>).

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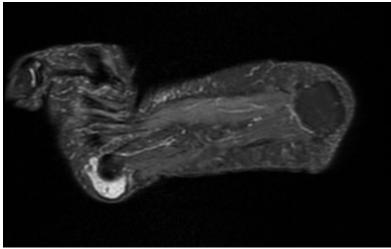


Figure 2: Sagittal section, showing bursitis under the 5th toe, in T2 hypersignal, bulging at the sole.

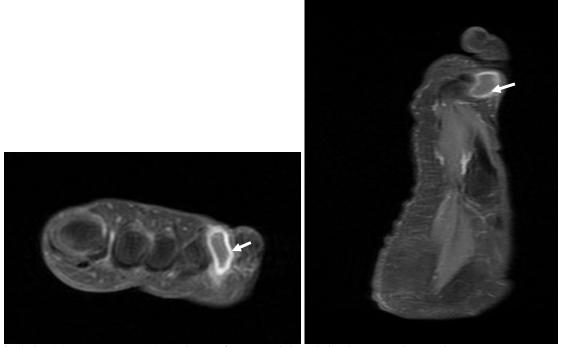


Figure 3: Axial (a) and coronal (b) sections, after gadolinium injection, showing peripheral enhancement of the collection (=>).

REFERENCES

1. Cyteval C, Baron-Sarrabere MP, Benis J. L'imagerie dans le diagnostic différentiel entre bursites et névromes de Morton. In : Bursites et pathologie des bourses séreuses. Hérisson C, Rodineau J, Simon L. Montpellier : Ed. Sauramps Medical, 2001; 51-6.