

Case Presentation

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Resolution of the case on page 317

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We present several cases with the same diagnosis and similar clinical presentation and epidemiologic characteristics. From the clinical point of view the onset of this condition consists of —variable degree— of swelling of soft tissues in different areas of the foot and, sometimes, it is associated with skin or fistula excoriations (Figure 1).



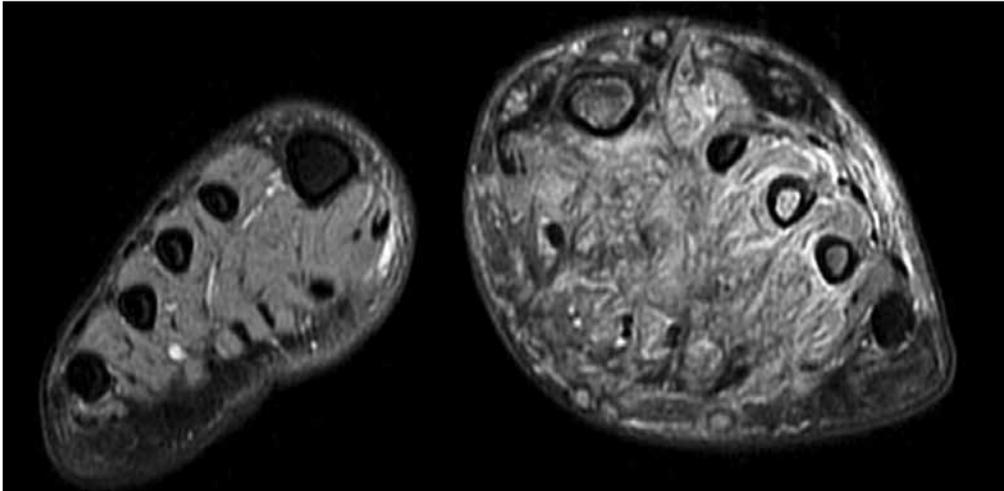
▲ **Figure 1.** Characteristic appearance: Remarkable swelling in left foot with skin color changes and discharge sinus on the foot medial aspect. The foot size should be compared with that of the contralateral foot.

Almost every patient reported walking without shoes during variable time. Age range in these cases oscillates between 21 and 62 years old, with remarkable male prevalence.

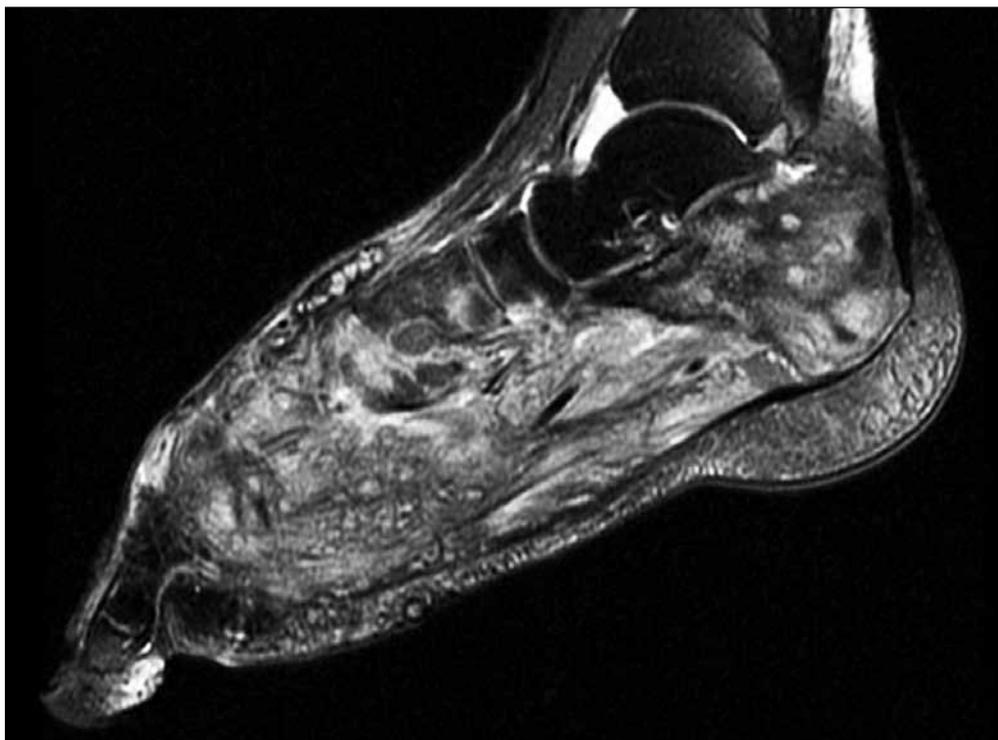
This article is aimed at revising this condition with special emphasis on MRI findings (and especially on one MRI characteristic sign).

Findings in and interpretation of imaging studies

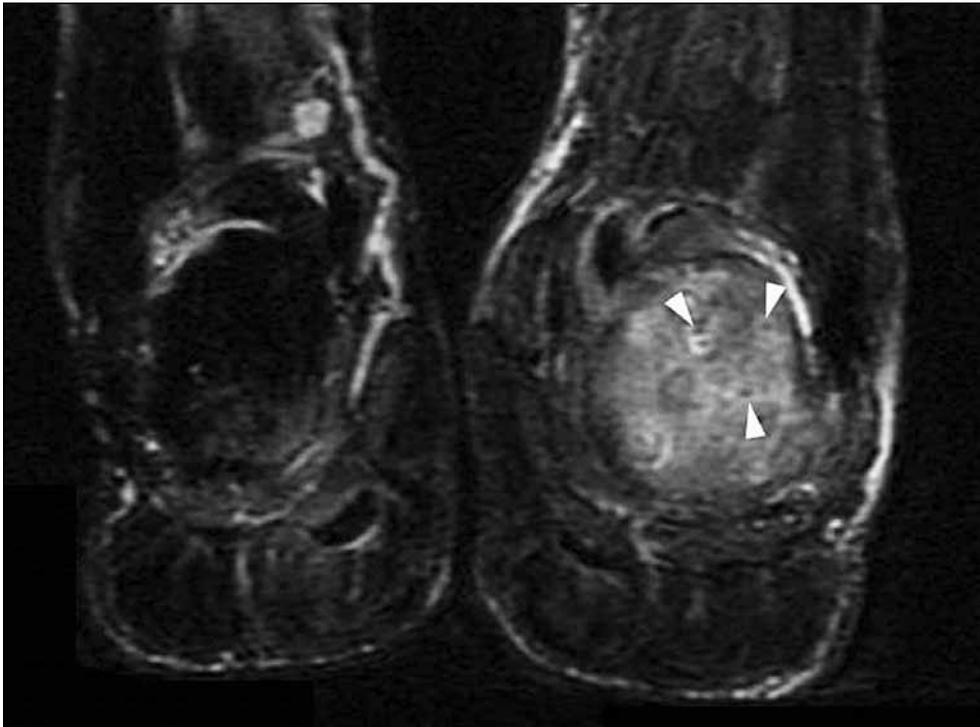
MRI images show remarkable swelling in the affected foot, with compromise of soft tissues and bone tissues. There is a virtually pathognomonic MRI sign in this condition (Figures 2-7).



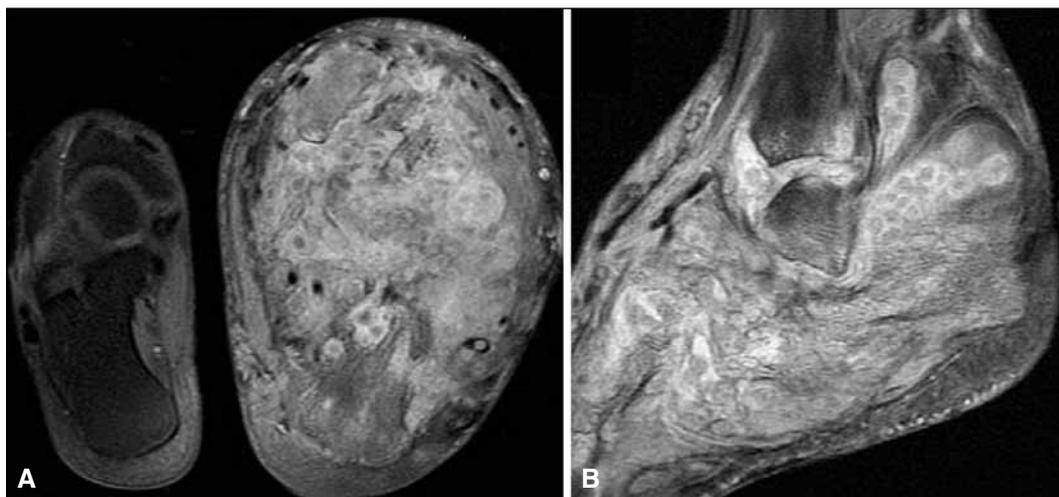
▲ **Figure 2.** MRI fat-suppression proton-density-weighted coronal sequence (TR/TE 1800/28.9). MRI allows us not only to evaluate bone damage but also to carry out thorough staging of degree and extension of soft tissues damage.



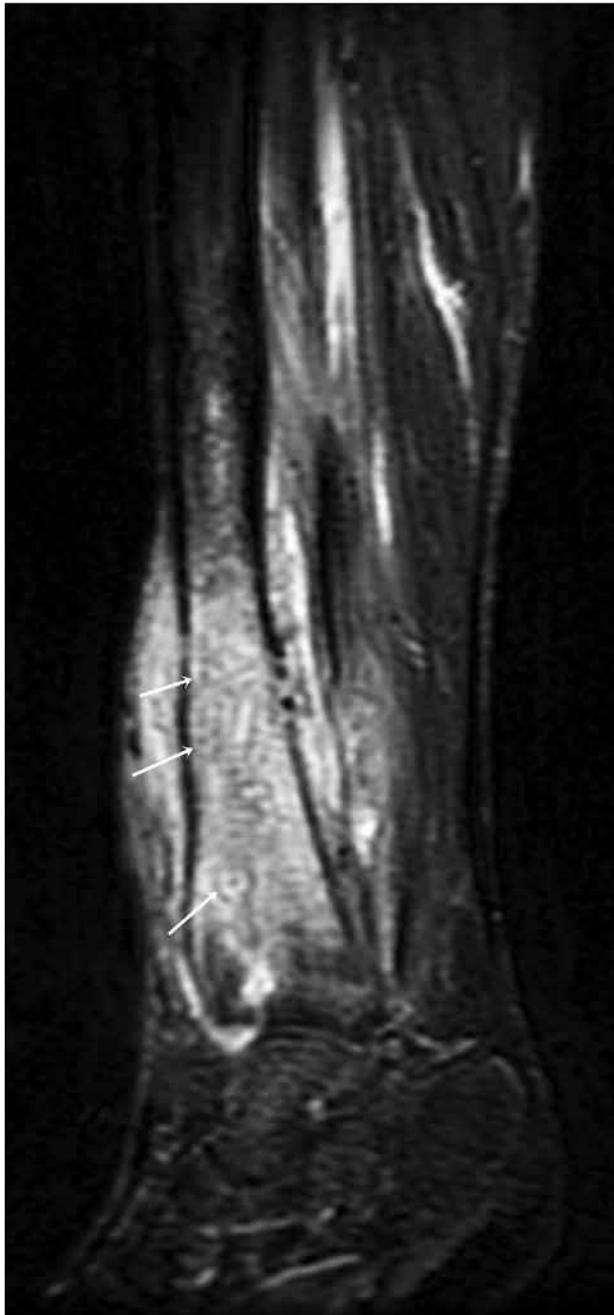
▲ **Figure 3.** MRI fat-suppression proton-density-weighted sagittal sequence (TR/TE, 1800/36.4). MRI shows the sign of the “point within the circle” in dorsal subcutaneous soft tissues, plantar deep muscle tissues and calcaneal bone.



▲ **Figure 4.** MRI fat-suppression T2-weighted coronal sequence (TR/TE, 5000/31.1). The characteristic images are seen disperse within the bone marrow of the calcaneal bone (points of arrows).



▲ **Figure 5.** MRI fat-suppression T1-weighted axial (A) and sagittal sequences (B) with gadolinium enhancement (A, TR/TE, 700/9.7 and B, TR/TE, 640/12.9). The granulomatous component of the lesion shows significant enhancement while the mycotic “grains” remain hypointense, making up the “point within the circle”.



◀ **Figure 6.** MRI Fast STIR sagittal sequence (TR/TE/TI, 4400/45.3/150). MRI also shows mycetoma typical lesions in unusual locations outside the foot (arrows). In this case, in the diaphyseal tibial canal.

Figura 7. Pelvis MRI T2-weighted coronal sequence (A) and STIR axial sequence (B) (A, TR/TE, 4000/84 and B, TR/TE/TI, 3300/41.2/150). Another example of extra-feet compromise (points of arrows) with lesions in the patient' right gluteal area. The muscle also shows atrophy and fat infiltration.

