

## Images of Interest / Imagens de Interesse

## Osseous Sarcoidosis

*Sarcoidose Óssea*Carolina Cairrão Padilha<sup>1</sup>, Lara Delgado<sup>1</sup><sup>1</sup>Serviço de Radiologia, Centro Hospitalar Lisboa Ocidental, Lisboa, Portugal

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## Abstract

Osseous involvement in sarcoidosis is relatively rare, although the radiologic features are virtually diagnostic. The authors present an image of radiography of the hands, with the classic appearance of osseous sarcoidosis.

## Keywords

Conventional radiography; Osseous sarcoidosis.

## Resumo

O envolvimento ósseo na sarcoidose é relativamente raro, contudo as características radiológicas sejam virtualmente diagnósticas. Neste caso apresentamos radiografia das mãos com o aspeto clássico da sarcoidose óssea.

## Palavras-chave

Radiografia convencional; Sarcoidose óssea.

## Case

A 54-year-old male with a past medical history of cutaneous sarcoidosis (*Lupus Pernio*) was admitted to the rheumatology consultation complaining of pain, tumefaction, and functional limitation of the second finger of the left hand. Radiographic imaging of the hands (Fig. 1) revealed a lace-like pattern with multiple well-defined cyst-like lesions in the phalanges, with greater expression in the distal and mild ones. A soft tissue thickness was observed in the left index finger (known as “sausage dactylitis”). The combination of clinical and radiologic features in the hands is virtually diagnostic of osseous sarcoidosis (*Perthes disease*).

## Discussion

Osseous involvement in sarcoidosis occurs in 1-13% of patients, with an estimated average occurrence of 5%.<sup>1</sup> It is more frequent in patients of African descent and it is usually accompanied by infiltrative skin lesions (i.e. *Lupus Pernio*).<sup>1,2</sup> Bone lesions are frequently asymptomatic, although some patients present with symptomatic dactylitis (swelling, pain and stiffness).<sup>3</sup>

Osseous sarcoidosis can involve any bone from the axial to the appendicular skeleton. Nevertheless, the phalanges in the hands and feet are most frequently affected.<sup>2</sup>

Radiologic features usually include multiple cystic lesions, sometimes resulting in a typical lacy pattern (these classic lesions, which affect the hands/feet, are known as *Perthes disease*/*Jungling's disease*).<sup>1</sup>



**Figure 1** – Radiography of the hands showing a lace-like pattern in the phalanges, with greater expression in the distal and mild ones, and also sausage dactylitis of the left index finger.

There are three radiological types of sarcoid bone disease: type I, big cystic lesions (rare); type II, multiple small cysts; type III, tunneling of the cortex of the phalanges, which leads to remodeling of the cortical and trabecular architecture.<sup>1</sup> This case showed that the combination of radiologic features in the hands/feet is virtually diagnostic for osseous sarcoidosis, in a patient with a history of *Lupus Pernio*.

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### **Ethical Disclosures / Divulgações Éticas**

*Conflicts of interest:* The authors have no conflicts of interest to declare.

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*Confidentiality of data:* The authors declare that they have followed the protocols of their work center on the publication of data from patients.

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*Protection of human and animal subjects:* The authors declare that the procedures followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).

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