



Sociedad Española  
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## Images in Clinical Rheumatology

### Sarcoid dactylitis as the initial manifestation of systemic sarcoidosis<sup>☆</sup>

### Dactilitis sarcoidea como manifestación inicial de sarcoidosis sistémica



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#### Clinical case

A 45 year-old man (originally from Ghana), with no past history of interest, presented for consultation due to swelling, pain and nail alteration on the fourth toe of the right foot of 3 months' duration. Physical examination revealed dactylitis and onychodystrophy (Fig. 1A), as well as papules and erythematous-orange plaques on the nasal columella and labial commissures (Fig. 1B).

#### Diagnosis and development

Radiological examination showed bone resorption of the distal phalanx of the right fourth toe (Fig. 1C). Histopathological examination of the skin lesions revealed multiple non-necrotising granulomas occupying the dermis, without identification of mycobacteria in the Ziehl-Neelsen stain. Laboratory tests: ESR 39 mm/1<sup>st</sup> h, CRP 17.8 (<5 mg/l); haemogram with leukopenia (3.500/mL) and lymphopenia (700/mL); angiotensin-converting enzyme 119.6 U/l (13.3–63.9 U/l); renal function, liver parameters, phosphocalcic metabolism and urine sediment normal. PPD and IGRA test were negative. Chest X-ray: bilateral reticular pattern and dubious hilar adenopathies. PET-CT scan was requested, which showed uptake of mediastinal and axillary adenopathies, multiple centroacinar and subpleural pulmonary nodules, hypersplenism and uptake of the lytic lesion of the fourth distal phalanx of the right foot, with no other bone lesions.

With the diagnosis of sarcoid dactylitis in the context of cutaneous (lupus pernio), bone, lymph node and pulmonary sarcoidosis,



**Figure 1.** A) Dactylitis and nail dystrophy on the fourth toe of the right foot. B) Papules and erythematous-orange plaques on the nasal columella and labial commissures (arrowheads) corresponding to cutaneous sarcoidosis (lupus pernio). C) The radiological image shows bone resorption of the distal phalanx of the fourth toe of the right foot.

treatment was started with oral prednisone (0.5 mg/kg/day), with improvement of the cutaneous lesions and dactylitis and disappearance of pain. Two months later, the patient discontinued oral prednisone treatment on his own accord, with rapid recurrence of the skin lesions and dactylitis, with subsequent resolution on reintroduction of treatment. The mediastinal adenopathies and the larger peribronchial and subpleural nodules remain stable at the control CT scan performed 6 months after the start of treatment.

#### Discussion

Sarcoid dactylitis is a rare manifestation seen in less than 1% of patients with sarcoidosis<sup>1,2</sup>. It is characterised by swelling, stiffness and pain of the affected toe, onychodystrophy when involving the distal phalanx and, in severe cases, deformity and bone resorption<sup>3</sup>. African-American patients present more frequently with extrapulmonary sarcoidosis (skin, eyes, bone marrow. . . ) than other races<sup>4</sup>. It has been reported that peripheral bone lesions may be more frequent in black patients<sup>5</sup>. However, recent studies have found that bone sarcoidosis may be more frequent in white patients, although bone involvement of the hands may be more frequent

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in black patients<sup>6,7</sup>. Sarcoid dactylitis has been associated with a worse prognosis and a higher risk of multisystem involvement<sup>6,7</sup>, so its recognition is essential to establish an early diagnosis and prevent complications. In addition, concomitant skin lesions (lupus pernio)<sup>8,9</sup> are common, highlighting the importance of dermatological examination in patients presenting with dactylitis.

### Conflict of interests

The authors have no conflict of interests to declare.

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### References

1. Pitt P, Hamilton EB, Innes EH, Morley KD, Monk BE, Hughes GR. Sarcoid dactylitis. *Ann of the Rheum Dis.* 1983;42:634–9.
2. Mori T, Yamamoto T. Dactylitis in sarcoidosis. *J Dermatol.* 2017;44:e340–1.
3. Barnard J, Newman LS. Sarcoidosis: immunology, rheumatic involvement, and therapeutics. *Curr Opin Rheumatol.* 2001;13:84–91.
4. Mirsaeidi M, Machado RF, Schraufnagel D, Sweiss NJ, Baughman RP. Racial difference in sarcoidosis mortality in the United States. *Chest.* 2015;147:438–49.
5. Wilcox A, Bharadwaj P, Sharma OP. Bone sarcoidosis. *Curr Opin Rheumatol.* 2000;12:321–30.
6. Sparks JA, McSparron JI, Shah N, Aliabadi P, Paulson V, Fanta CH, et al. Osseous sarcoidosis: Clinical characteristics, treatment, and outcomes – experience from a large, academic hospital. *Semin Arthritis Rheum.* 2014;44:371–9.
7. Zhou Y, Lower EE, Li H, Farhey Y, Baughman RP. Clinical characteristics of patients with bone sarcoidosis. *Semin Arthritis Rheum.* 2017;47:143–8.
8. Duckworth AD, Hill AT, Beggs I, Patton JT, Salter DM, Porter DE. Sarcoidosis presenting as a proximal phalangeal bony swelling—a case and review of the literature. *Hand (N Y).* 2010;5:90–4.
9. Madureira P, Pimenta S, Cardoso H, Guimarães Cunha R, Costa L. Sarcoidosis: An unusual presentation. *Reumatol Clin.* 2017;13:227–9.