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Images in Rheumatology

I Don't Think This Is Gout...

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Osseous sarcoidosis is a well-recognized manifestation of systemic sarcoidosis; however, its radiological natural history is poorly described.

A 29-year-old man presented with pain, swelling, and erythema at the site of a recent minimal-trauma fracture of the right index finger proximal phalanx. He reported a primary care diagnosis of gout affecting his hands and feet. He was of Samoan descent and had a family history of gout. The patient was admitted under plastic surgery and underwent debridement and fracture reduction. Soft tissue cultures isolated *Staphylococcus aureus* and histology demonstrated nonnecrotizing granulomatous inflammation. He was determined to have a pathological fracture, and following confirmation of negative bone cultures, was seen by rheumatology for an opinion. Examination revealed an apparent painless deforming arthropathy of his hands and feet, with marked associated soft tissue swelling but no tophi. His erythrocyte sedimentation rate, C-reactive protein, and serum uric acid levels were normal. Complete hand radiographs were requested, but the patient was lost to follow-up. The patient presented again 3 years later with a cutaneous eruption affecting bilateral dorsal hands (Figure 1), dorsal feet, and forearms. Skin biopsy demonstrated nonnecrotizing granulomatous inflammation. Mycobacterial and fungal cultures and mycobacterial PCRs (tuberculous, leprae, and pan-mycobacterial) on tissue were negative.

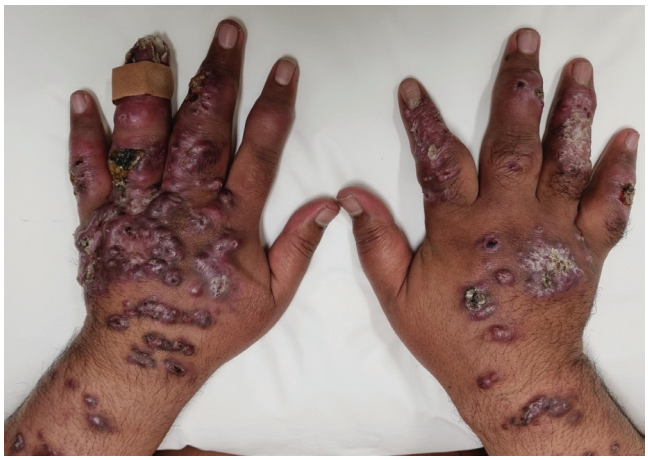

Figure 1. Examination demonstrated violaceous scaly verrucous nodules and plaques, with secondary crusting and ulceration.

Relevant additional imaging included a chest radiograph demonstrating hilar adenopathy, lace-like lucent lesions in multiple phalanges on hand radiographs (Figure 2), and an 18F-fluorodeoxyglucose positron emission tomography scan demonstrating lymphadenopathy as well as avid osseous lesions in the hands and feet. The patient was diagnosed with systemic sarcoidosis with painless osseous, verrucous cutaneous,[1] and nodal involvement. He was commenced on prednisolone 25 mg daily, methotrexate 20 mg weekly, and adalimumab 40 mg every 2 weeks, with an excellent cutaneous response to therapy.

REFERENCE

1. Sussman ME, Pousti BT, Grossman SK, Lee JB, Hsu S. Verrucous sarcoidosis: a rare clinical presentation of sarcoidosis. Cureus 2021;13:e15175.

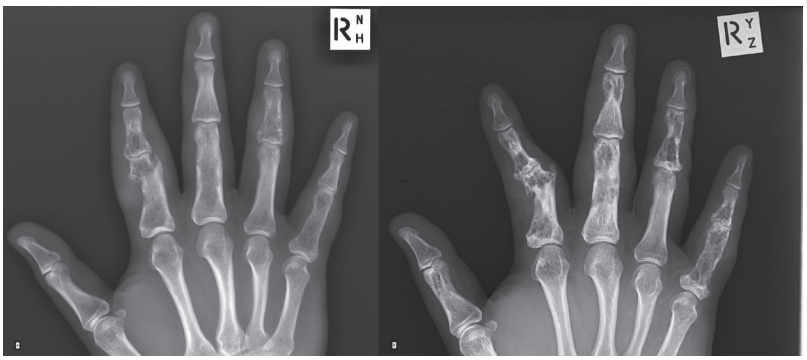

Figure 2. Serial radiographs of the right hand, taken with a 3-year interval. (A) At initial presentation, the radiographs demonstrated lace-like lucent osteolytic lesions affecting the proximal and middle phalanges of the hands. (B) Three years later, a pathological fracture is seen through the osseous lesion in the right 2nd proximal phalanx. There is extensive soft tissue swelling without erosive joint disease and with relative preservation of the joint space.