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Images in Clinical Rheumatology

Painful Subcutaneous Nodule[☆]

Nódulo subcutáneo doloroso

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The patient was a 57-year-old woman who practiced hiking, and had no history of disease. She presented with a subcutaneous lesion measuring 5 mm in the fifth toe of her left foot that she had detected 12 weeks earlier. The lesion was intensely painful and had undergone no changes. Plain radiography of the foot revealed the presence of a small calcification on the lateral border of the distal phalanx of the fifth toe on left foot (Fig. 1). Analyses included inflammatory markers, calcium, phosphorus and uric acid, which were all normal. The pain disappeared after extirpation (Fig. 2). In 20 months of follow-up, it has not reappeared.

The diagnosis was tenosynovitis with psammomatous calcification. Although it can be considered part of the spectrum of tumor lesions with calcification, its clinical and histological features indicate that it is a distinct entity. It is very seldom observed, and rarely reported in the medical literature.^{1–4} It can be described clinically as a single subcutaneous nodule or mass that is most frequently located in the acral regions of the extremities, predominantly in adult women. The patients mentioned a history of repeated injuries associated with their occupation or related to sports.² The lesions were situated in tendon or in peritendinous soft tissue. From the histological point of view, they were found to be a proliferation composed of histiocytes and (myo) fibroblasts, and the presence of numerous psammoma bodies.

The differential diagnosis should include a variety of neoplastic and nonneoplastic processes of the distal extremities accompanied by calcifications: gout, pseudogout, calcifying aponeurotic



Fig. 1. Plain radiography shows a small calcification in a lateral region of the distal phalanx of the fifth toe.

fibroma, giant cell tumor of the tendon sheath, synovial sarcoma and parosteal osteochondromatous proliferation.^{1–4} The addition of tenosynovitis with psammomatous calcification to the differential diagnosis of painful acral lesions is important, and will make it possible to avoid confusing them with other neoplastic or nonneoplastic diseases in which calcifications are present.

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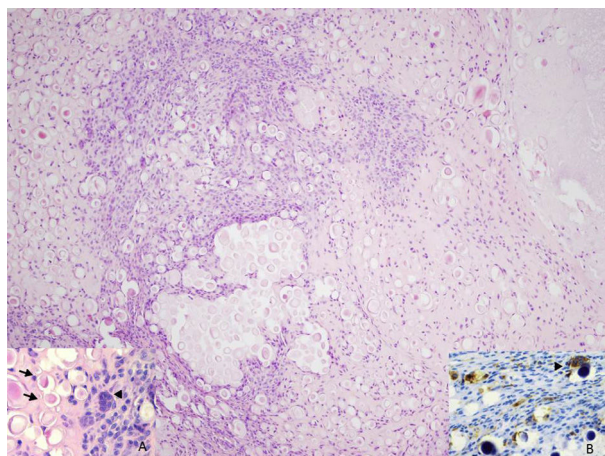


Fig. 2. Abundant psammoma bodies and proliferation of fusiform mononuclear cells (H&E 100 \times). (A) Presence of spherical calcifications (arrows) and multinuclear giant cells (arrowhead) (H&E 200 \times). (B) CD68 immunostaining reveals the presence of disseminated mononuclear cells surrounding the calcifications and multinuclear giant cells (arrowhead) (CD68 200 \times).

Ethical Disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

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Conflicts of Interest

The authors declare they have no conflicts of interest.

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