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DERMATOLOGY IMAGES

Clues for eosinophilic fasciitis: groove sign and orange peel appearance

Pistas para fasceíte eosinofílica: sinal do sulco e aparência em casca de laranja

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A 45-year-old female was referred to dermatology with a 1-year history of progressive skin induration of the limbs. She denied joint mobility restrictions and systemic symptoms.

Clinical examination revealed symmetrical cutaneous induration and thickening of the legs, thighs, forearms, and arms with areas of orange peel-like appearance and skin depressions along the course of the superficial veins ("groove sign") (Fig. 1A and B). Hands and feet were spared. Raynaud's phenomenon was absent, and nail fold capillaroscopy was unremarkable. Laboratory findings demonstrated blood eosinophilia $(1.9 \times 10^9/L)$ and increased erythrocyte sedimentation rate (120 mm/h).

A full-thickness incisional biopsy was consistent with eosinophilic fasciitis, establishing the diagnosis (Fig. 2). The patient started treatment with prednisolone 1 mg/kg/day. However, considering the poor response, recently, weekly methotrexate was added.

Eosinophilic fasciitis is a rare fibrosing disorder of muscle fascia of unknown etiology. Clinically, areas of orange peel-like ("pseudo-cellulite") and linear depressions along the course of the superficial veins ("groove sign") are characteristic¹. This last physical finding is probably due to the relative sparing of the epidermis and superficial dermis around the vessels by the fibrotic



Figure 1. Cutaneous induration and thickening of the right arm and forearm, with a "pseudo-cellulite" appearance on the arm (A: asterisk) and "groove sign" on the forearm (B: arrow).

process compared to the deep tissue². A full-thickness biopsy including the fascia and/or magnetic resonance showing increased signal intensity within the fascia is crucial for diagnosis. The first line of treatment is systemic corticosteroids, which may be associated with corticosteroid-sparing agents, like methotrexate³.

Recognizing the clinical clues of eosinophilic fasciitis is important, as prompt diagnosis and treatment are

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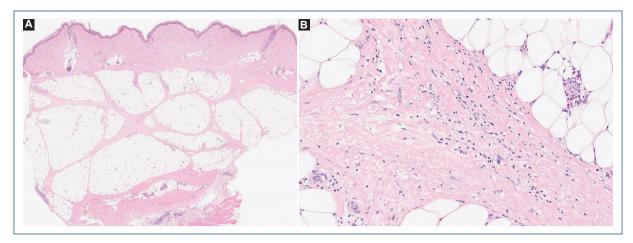


Figure 2. A full-thickness incisional biopsy showed hypodermis septa thickness with a lymphohistic plasma cells, and occasional eosinophils extending into the lower dermis (H & E, magnification: $A: \times 1$; $B: \times 40$).

essential to prevent the development of joint contractures, which are responsible for the high morbidity of this condition.

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Conflicts of interest

None.

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References

- Asaoka K, Watanabe Y, Itoh K, Hosono N, Hirota T, Ikawa M, et al. A case of eosinophilic fasciitis without skin manifestations: a case report in a patient with lupus and literature review. Clin Rheumatol. 2021;40:2477-83.
- Camard M, Maisonobe T, Flamarion E. The groove sign in eosinophilic fasciitis. Clin Rheumatol. 2022;41:3919-20.
- Jinnin M, Yamamoto T, Asano Y, Ishikawa O, Sato S, Takehara K, et al. Diagnostic criteria, severity classification and guidelines of eosinophilic fasciitis. J Dermatol. 2018;45:881-90.