

Neutrophilic Dermatositis of the Hands in Rheumatoid Arthritis

Dermatosis neutrofílica de las manos asociada a artritis reumatoide

To the Editor:

Neutrophilic dermatosis of the hands is a rare entity, with no more than 30 well-documented cases reported in the literature.¹ Nearly a third (27%) of these cases are associated with tumors, whereas an association with rheumatoid arthritis is rare.²

We describe the case of a 46-year-old woman with longstanding seropositive rheumatoid arthritis. The disorder was controlled by a weekly dose of 15 mg of methotrexate. The patient had consulted on account of the appearance, 20 days previously, of sensitive lesions on her hands. These nonscaly, erythematous-violaceous lesions with poorly defined borders covered the thenar and hypothenar eminences of both hands (Figure 1), and had also spread to the dorsum of the hands, especially affecting the first three fingers and the second metacarpophalangeal joint of the left hand (Figure 2). The patient had no fever. A histopathology study revealed intense neutrophilic leukocytoclastic vasculitis and edema in the dermis (Figure 3). Direct immunofluorescence was negative. Noteworthy in the complete blood count was an erythrocyte sedimentation rate of 45 mm in the first hour, and there was no evidence of left shift. The patient was diagnosed with neutrophilic dermatosis of the hands, and treatment was commenced with 0.75 mg/kg/d of oral prednisone. The lesions resolved fully within 3 weeks. A number of complementary tests were performed, as follows: complete blood count, biochemistry, coagulation studies, antinuclear antibodies, thyroid hormones, biomarkers, serology for syphilis, hepatitis B and C, and human immunodeficiency virus, peripheral blood smear, chest x-ray, abdominal ultrasound, and colonoscopy. All results were negative or normal.

Neutrophilic dermatosis of the hands was first described in 1995 by Strutton et al,³ who called it 'pustular vasculitis of the hands'. In 2000 Galaria et al described 3 new cases and proposed the term 'neutrophilic dermatosis of the dorsal hands'.⁴ In 2004 Weenig et al described 4 patients whose



Figure 1 Erythematous, violaceous plaques on the thenar and hypothenar eminences.



Figure 2 Erythematous plaque covering the dorsum of the fingers and the metacarpophalangeal joint.

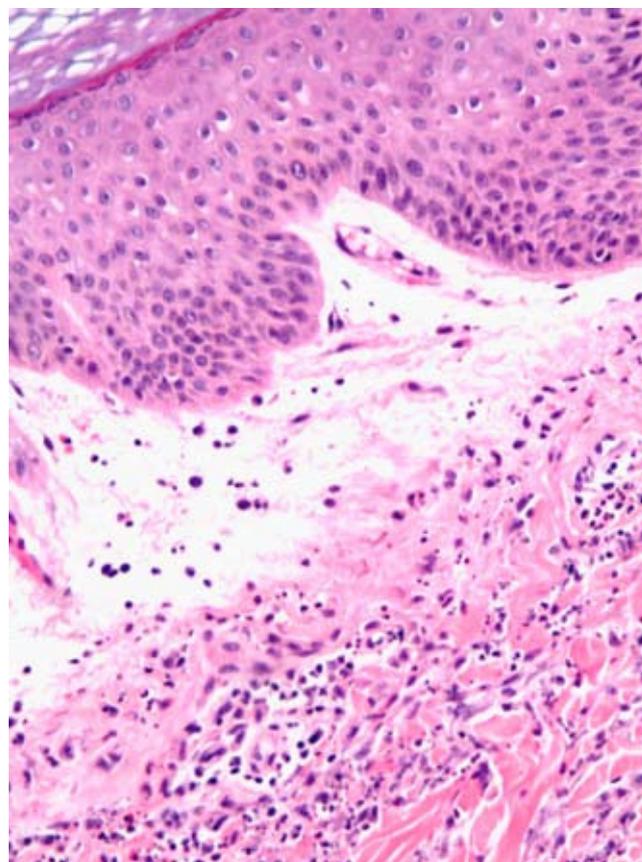


Figure 3 Leukocytoclastic vasculitis and edema in the dermis (hematoxylin-eosin, ×60).

palms as well as the backs of their hands were affected.⁵ Neutrophilic dermatosis of the hands is currently considered to be a localized variant of Sweet syndrome affecting the hands but capable of spreading to other locations.¹ It is not always accompanied by fever and neutrophilia; these are absent, in fact, in over 30% of cases.¹ In clinical terms, pustular lesions or lesions filled with blood-stained fluid may occasionally be observed. The disorder is particularly important because it is frequently associated with other underlying, often undiagnosed, diseases. In fact, some studies have indicated that as many as 27% of cases

of neutrophilic dermatosis of the hands are associated with tumors (mostly hematological in origin), and 15% of cases are associated with inflammatory bowel disease.² The disorder has also sporadically been associated with hepatitis C and streptococcal infection.⁶ Its occurrence in patients with rheumatoid arthritis is more infrequent, and in this context, it is important to distinguish it from other neutrophilic dermatoses related with this disease, such as rheumatoid neutrophilic dermatitis, erythema elevatum et diutinum, and pyoderma gangrenosum.⁷ Given the clinical similarities, a differential diagnosis with rheumatoid neutrophilic dermatitis becomes particularly relevant.⁸ There are no more than 30 cases of rheumatoid neutrophilic dermatitis—first described in 1978 by Ackerman—reported in the literature. This nonparaneoplastic sudden-onset dermatosis mostly affects women with seropositive rheumatoid arthritis. It is characterized by the formation of tender erythematous nodules and papules on the hands and extensor surfaces of the limbs, mainly around the joints and adjacent areas. The histopathology study reveals an intense neutrophilic infiltrate in the dermis with a variable degree of leukocytoclasia. Rheumatoid neutrophilic dermatitis is distinguished from neutrophilic dermatosis of the hands by the absence of vasculitis. The finding of vasculitis in the latter becomes more evident as time passes after the onset of symptoms.^{1,9} It is not unusual for rheumatoid neutrophilic dermatitis to resolve spontaneously or secondary to an improvement in the underlying rheumatoid disease. Other cases tend to resolve in response to treatment with dapsone.⁸ The treatment of choice for neutrophilic dermatosis of the hands is systemic corticosteroid therapy using oral prednisone at doses of up to 1 mg/kg/d. Contrasting with rheumatoid neutrophilic dermatitis, there is a response rate of up to 71%. Cases that fail to respond to systemic corticosteroid therapy should be treated with dapsone or potassium iodide.¹⁰

In conclusion, in cases of neutrophilic dermatosis of the hands, we believe that extensive screening should be performed to exclude the possibility of neoplastic or other diseases, given that there is a rare association—as occurred with our patient—between neutrophilic dermatosis of the hands and rheumatoid arthritis-like rheumatological disorders.

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Allergic Contact Dermatitis due to Amorolfine in Nail Lacquer

Dermatitis alérgica de contacto por amorolfina en laca de uñas

To the Editor:

Allergic contact dermatitis caused by antifungal drugs is relatively infrequent despite the widespread use of these agents. A few cases of allergic contact dermatitis have been described, with imidazole derivatives as the most frequently implicated allergens.^{1,2}

Amorolfine is a morpholine derivative that is structurally unrelated to any other antimycotic drug. It was originally marketed in some countries as a nail lacquer treatment for onychomycosis. Amorolfine cream has recently been made available in Europe, Asia, and South America as a treatment for fungal skin infections. To date, only 3 cases of allergic contact dermatitis attributed to amorolfine have been reported in the literature.³⁻⁵

A 36-year-old woman, with no relevant past history, was referred to our dermatology clinic with possible onychomycosis of the 2 great toenails that had developed over several months and that had not been treated previously. Physical examination revealed both great toenails to be distally thickened and slightly greenish