

A 52-year-old woman with asymptomatic annular erythematous plaques

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A 52-year-old woman sought medical attention because of several annular erythematous lesions with central clearing on her body since seven months ago. No pruritus or burning sensations were noted. Her medical and family history was unremarkable. Her Fitzpatrick skin photo-type was II. On dermatological physical examination, there were several annular erythematous plaques with raised borders and central clearing on dorsal aspect of her hands, wrists, forearms, and neck. (Figures 1 and 2) General physical examination was unremarkable. An incisional skin biopsy was done from one of her lesions including the normal skin, border, and center of the lesion.

Histological examination showed intact epidermis, and infiltration of histiocytes and multinucleated giant cells centered in the mid dermis. There were areas of almost complete loss of elastic fibers surrounded by histiocyte aggregates. There was also mild to moderate mainly lymphocytic infiltration around the vessels. Mucin deposition was not seen (Figures 3 to 6).

What is your diagnosis?

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Figure 1. An erythematous plaque on the neck with raised borders and central clearing without any epidermal changes.



Figure 2. Erythematous non-scaling plaques the the left wrist.

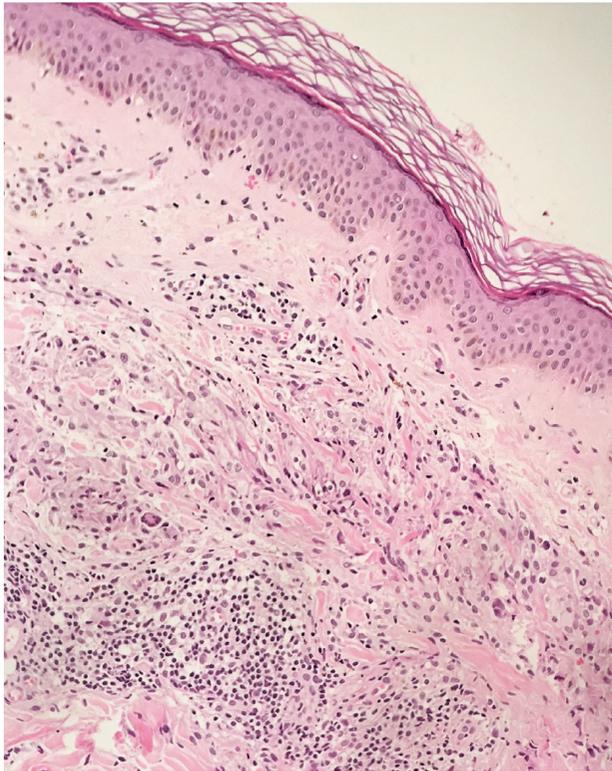


Figure 3. Histiocytic aggregates, few multinucleated giant cells, and lymphocytic infiltrates in the upper and mid dermis (H&E, 200×).

Actinic granuloma

DISCUSSION

Actinic granuloma is an idiopathic disorder of middle-aged adults that occurs more in females^{1,2}. Actinic granuloma presents as pink papules that unite and make annular plaques with different diameters. The plaques are characterized by elevated borders and hypo pigmented centers. Its etiology is unknown but the most common suggestion is chronic sun exposure and solar radiation, causing an inflammatory response.

Solar radiation damages the superficial elastic fibers and turns them to weak antigens, stimulating the immune system and increasing the activity of CD4 lymphocytes. A granulomatous reaction pattern occurs with foreign-body type multinucleated cells and histiocytes engulfing elastotic fibers. The association between sun damage and granulomatous reaction is not necessarily a causal relation, and reports showing the presence of the disease on sun-protected areas of the skin support this idea³.

The treatment of actinic granuloma is disappointing. Several treatments with variable

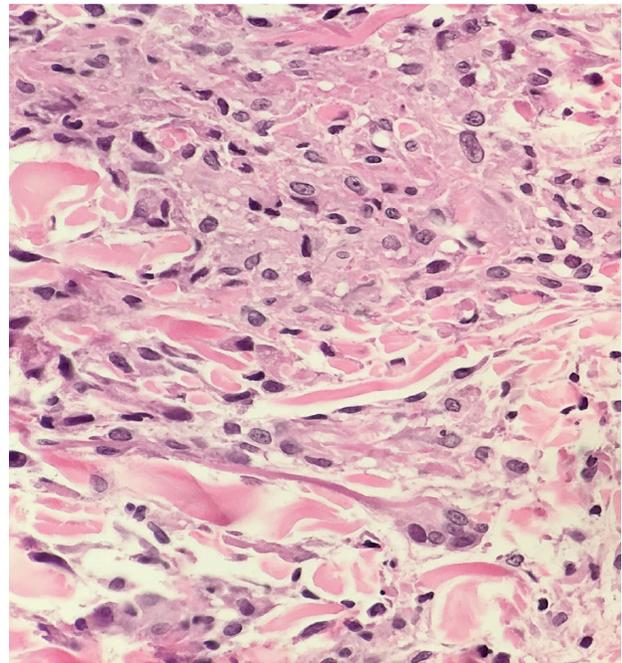


Figure 4. Histiocytic infiltrates and multinucleated giant cells (H&E, 400×).

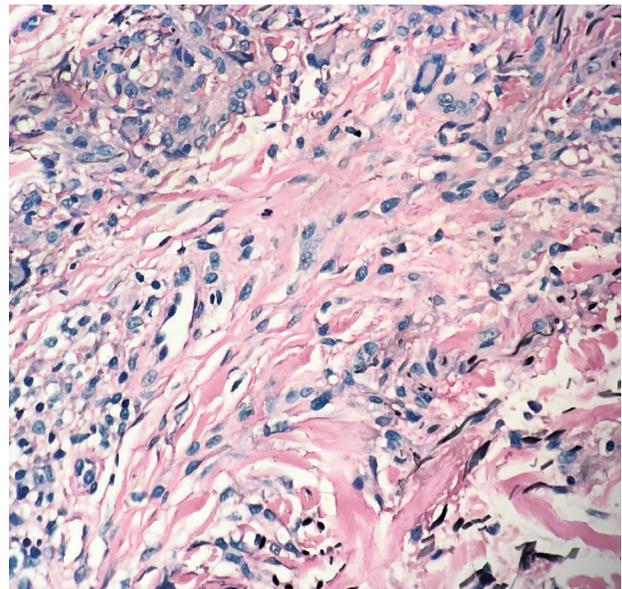


Figure 5. Absence of elastic fibers in the central zone (Orcein-Giemsa staining, 400×).

results have been reported, including antimalarials, topical and intralesional steroids, methotrexate, systemic retinoids, pentoxifylline, cryotherapy, and phototherapy^{4,5}.

In our case, acitretin 25 mg/day was started with favorable results in her follow-up. In the third month of follow-up, the lesions ceased to spread and some of the lesions started to disappear.

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