Granuloma Faciale in Woman With Levamisole-Induced Vasculitis

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PRACTICE **POINTS**

- Granuloma faciale is a benign dermal process presenting with a red-brown plaque on the face of adults that typically is not ulcerated unless physically manipulated.
- Skin biopsy often is required for correct diagnosis.
- Granuloma faciale does not resolve spontaneously and tends to be chronic.

To the Editor:

A 53-year-old Hispanic woman presented to our dermatology clinic for evaluation of an expanding plaque on the right cheek of 2 months' duration. The patient stated the plaque began as a pimple, which she picked with subsequent spread laterally across the cheek. The area was intermittently tender, but she denied tingling, burning, or pruritus of the site. She had been treated with doxycycline and amoxicillin–clavulanic acid prior to presentation without improvement. She had a history of levamisole-induced vasculitis approximately 6 months prior. A review of systems was notable for diffuse joint pain. The patient denied tobacco, alcohol, or illicit drug use in the preceding 3 months and denied any changes in her medications or in health within the last year.

Physical examination revealed a well-appearing, alert, and afebrile patient with a pink, well-demarcated plaque on the right cheek (Figure 1). The borders of the plaque were indurated, and the lateral aspect of the plaque was eroded secondary to digital manipulation by the patient. She had no cervical lymphadenopathy. There were no other abnormal cutaneous findings.

There is a broad differential diagnosis for a pink expanding plaque on the face, which requires histopathologic correlation for correct diagnosis. Three broad categories in the differential are infectious (eg, bacterial, fungal), medication related (eg, fixed drug eruption), and granulomatous (eg, granuloma faciale [GF], sarcoidosis,

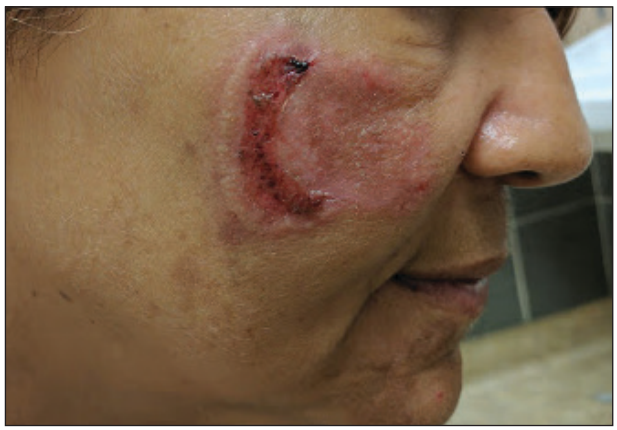

FIGURE 1. Granuloma faciale. A well-demarcated, red-brown, oval plaque with secondary erosion due to excoriation on the right cheek.

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The authors report no conflict of interest.

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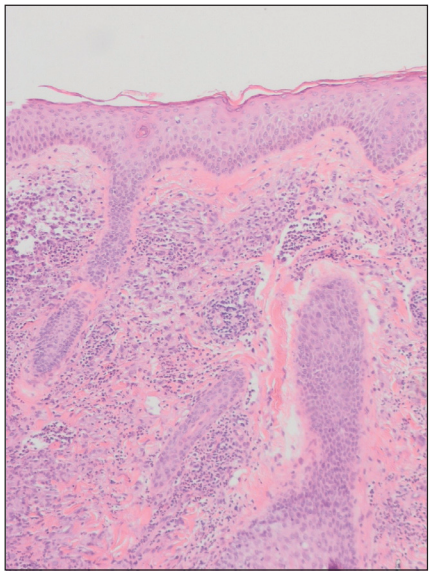

FIGURE 2. Histopathologic examination showed a diffuse, dense, mixed inflammatory cellular infiltrate with numerous neutrophils and eosinophils with leukocytoclasia, sparing the subepidermal area, forming a grenz zone (H&E, original magnification ×10).

tumid lupus, leprosy, granulomatous rosacea). A biopsy of the lesion revealed a mixed inflammatory cell dermal infiltrate with perivascular accentuation and intense vasculitis that was consistent with GF (Figure 2). Gomori methenamine-silver, periodic acid–Schiff, Fite-Faraco, acid-fast bacilli, and Gram staining were negative for organisms. Tissue cultures were negative for bacterial, mycobacterial, and fungal etiology. The patient was started on high-potency topical steroids with a 50% improvement in the appearance of the skin lesion at 1-month follow-up.

Granuloma faciale is a rare chronic inflammatory dermatosis with a predilection for the face that is difficult to diagnose and treat. The diagnosis is based on clinical and histologic findings, and it typically presents as single or multiple, well-demarcated, red-brown nodules, papules, or plaques that range from several millimeters to centimeters in diameter.[1,2] Extrafacial lesions may be seen.[3] Granuloma faciale usually is asymptomatic but occasionally has associated pruritus and rarely ulceration. The prevalence and pathophysiology of GF is not well defined; however, GF more commonly is reported in middle-aged White males.[1]

Histologic examination of GF reveals a mixed inflammatory cellular infiltrate in the upper dermis. A grenz zone, which is a narrow area of the papillary dermis uninvolved by the underlying pathology, may be seen.[1] Contrary to the name, granulomas are not found histologically. Rather, vascular changes or damage frequently are present and may indicate a small vessel vasculitis pathologic mechanism. Granuloma faciale also has been associated with follicular ostia accentuation and telangiectases.[4]

Many cases of GF have been misdiagnosed as sarcoidosis, lymphoma, lupus, and basal cell carcinoma.[1] In addition, GF shares many clinical and histologic features with erythema elevatum diutinum (EED). However, the defining features that suggest EED over GF is that EED has a predilection for the skin overlying the joints. Histopathologically, EED displays granulomas and fibrosis with few eosinophils.[5,6]

The variable response of GF to treatments and lack of efficacy data have contributed to the complexity and uncertainty of managing GF. The current first-line therapies are topical tacrolimus,[7] cryotherapy,[8] or corticosteroid therapy.[9]

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