

BRIEF ARTICLE

Idiopathic Aseptic Facial Granuloma

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ABSTRACT

Pyodermite froide du visage, otherwise known as idiopathic facial aseptic granuloma (IFAG), is a benign lesion exclusively seen in children and presents as a cold abscess on the face.¹ We report a case of a 14-year-old male with IFAG who failed initial treatment with oral doxycycline, but responded to treatment with oral 13-cis-retinoic acid, oral *amoxicillin-clavulanate* and intralesional triamcinolone injections over a 7 month period.

INTRODUCTION

Idiopathic facial aseptic granuloma (IFAG) or pyodermite froide du visage is seen exclusively in children.¹ It presents as an erythematous to violaceous nodule or plaque most commonly seen on the cheeks or eyelids.² This condition most often presents as a single lesion within a triangle-shaped area delineated by the external limit of the orbit, the labial angle, and the ear lobe.⁶ Multiple lesions have also been reported.⁷ Lesions tend to resolve spontaneously with minimal scarring within a few months to a year.² There are no risk factors that predispose an individual to developing IFAG.⁴

CASE REPORT

A 14-year-old healthy male presented for evaluation of an asymptomatic, slowly enlarging red lesion following mild eruption of acne. Examination revealed a 4 x 4 cm non-

tender, edematous, firm plaque on the left cheek (Figure 1). Several acneiform papules were present after 4 months of treatment with oral doxycycline 100 mg daily and topical clindamycin 1% solution. No lymphadenopathy was present. The patient denied any pain, drainage, fever, weight loss or other constitutional symptoms. There was no history of facial redness or blepharitis.

A punch biopsy was performed on the left cheek and demonstrated pan-dermal lymphoplasmacytic infiltrate with numerous histiocytes and hemosiderin deposition. A diagnosis of IFAG was made. Treatment was initiated with oral 13-cis-retinoic acid 40 mg twice daily, oral azithromycin 250 mg daily for 6 days, and topical clindamycin 1% solution. 1 cc of intralesional triamcinolone (10 mg/cc) was injected every other month for 12 months. At 2 month follow up, he was started on a 30-day course of oral amoxicillin-clavulanate 875-125 mg twice



Figure 1. Following four-months of moderate acne vulgaris on the cheeks treated with doxycycline 100 mg daily, the patient developed this erythematous, indurated, multi-lobular plaque on the left cheek typical of idiopathic facial aseptic granuloma.

daily with imperceptible clinical changes. Improvement was finally noted after four intralesional triamcinolone injections and seven months of oral 13-cis-retinoic acid 40 mg twice daily (Figure 2). Continued improvement was noted after restarting doxycycline 100 mg daily, and six intralesional triamcinolone injections (Figure 3).

DISCUSSION

Two theories have been promulgated to explain the pathogenesis of IFAG. It may represent an embryologic remnant of an epidermal cyst resulting in an inflammatory



Figure 2. Following treatment with 13-cis-retinoic acid 40 mg twice daily for 4 months, azithromycin 200 mg Pak of 6 tablets monthly for 3 months, and 1 cc of intralesional triamcinolone (10 mg/cc) injected twice two months apart, only modest improvement was noted.

reaction or represent localized granulomatous rosacea in childhood.³ Patients with IFAG are at increased risk for the development of rosacea, especially the ocular variant.² Furthermore, signs of rosacea including flushing, papules, and pustules appear in some patients and both conditions respond slowly to local and systemic antibiotics.²

The differential diagnosis for IFAG includes any condition that presents as a “cold” inflammatory nodule or plaque. (See Table 1). The medical history and the clinical manifestations of IFAG are distinctive, and histopathology can provide evidence to exclude many of these considerations.

Although this patient did not exhibit a personal history or clinical features of rosacea, treatment approaches mirror those of granulomatous rosacea. After failing to respond to topical and systemic antibiotics,



Figure 3. After one year of treatment including a seven-month course of 13-cis-retinoic acid 40 mg BID followed by doxycycline 100 mg daily, and 6 intralesional injections of 1 cc intralesional triamcinolone (10 mg/cc) every other month, considerable improvement is noted.

alternative oral antibiotics were chosen in combination with oral 13-cis-retinoic acid and intralesional steroids.⁶ It has been shown that 13-cis-retinoic acid can be used safely in the pediatric population.⁵ It is important to prepare patients and their families for the possibility of prolonged treatment, though the prognosis is excellent in time.⁴

Table 1. Conditions that can appear as solitary plaques on the face with distinguishing features

Condition	Distinguishing Clinical Features
Pilomatrixoma	Hard or “calcified” nodule.
Granuloma faciale	Moist friable, soft, purple-red papule or plaque
Localized infectious pyoderma	Red, warm nodule with pus (furuncle) or multiple foci with pus (carbuncle). Obtain bacterial culture and sensitivity
Nodulocystic acne	Multiple papular, pustular, and nodulo-cystic lesions with comedones scattered over face
Rosai Dorfman disease	Multiple papules and plaques (not solitary) with lymphadenopathy
Lymphocytoma cutis	Homogenous erythema over a nodule with pathology demonstrating a dense lymphocytic infiltrate rather than a granulomatous process
Exaggerated insect bite reaction	Fixed urticarial lesion with a history of a bite and many eosinophils in histopathology
Cutaneous Leishmaniasis	History of travel, a bite, and ulcerating lesions
Kerion (Inflammatory tinea)	History of exposure to soil or an animal with scaling or hair loss (Source of zoophilic or geophilic fungus). Confirmation with potassium hydroxide (KOH) preparation or fungal culture.

Conflict of Interest Disclosures: Robert T. Brodell has participated in multi-center clinical trials with:

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