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Rapidly Growing Eyelid Lesion in a 73-Year-Old Man

Whitney Stuard Sambhariya, MD, PhD; Ashley Campbell, MD

Figure 1. Large erythematous nodule with raised borders under the right eyebrow with central ulceration. A, Demonstrates the lesion after 5 days from initial onset. B, Demonstrates the lesion 2 weeks after initial onset and 1 week of treatment. Black arrowhead indicates the lesion.

A 73-year-old man presented to the oculoplastics clinic with a 5-day history of a rapidly growing right eyebrow lesion. The lesion was not causing substantial discomfort, and the patient denied additional symptoms, including vision changes. The patient had no history of malignancy or other dermatologic problems. On examination, he had a large erythematous nodule with raised borders under the right brow with central ulceration that was draining clear material (**Figure 1**A). The rest of the ophthalmic examination was normal. Based on the rapid presentation and clinical appearance, the lesion was hypothesized to be a brow abscess. The patient was prescribed clindamycin 4 times a day for 10 days and erythromycin ointment twice a day for 10 days, instructed to start warm compresses to promote abscess drainage and healing, and told to follow up in 1 week. Erythromycin, commonly used in skin infections, was used topically for coverage of gram-positive and some gram-negative organisms. Clindamycin was prescribed orally due to the concern for skin abscess and to cover *Staphylococcus* and *Streptococcus* species.

After 1 week, the lesion continued to enlarge (Figure 1B). The ulcerated central depression displayed minimal drainage without expressible material. The patient's ophthalmic examination continued to be otherwise normal. Although trimethoprim/sulfamethoxazole and clindamycin cover various *Staphylococcus* subtypes, the patient was prescribed trimethoprim/sulfamethoxazole for 14 days given no response to the clindamycin trial and to increase the gram-negative coverage. At the patient's next visit 1 week later, 2 weeks after presentation, the lesion remained refractory to treatment and appeared unchanged.

WHAT WOULD YOU DO NEXT?

- **A.** Observe with no additional testing or intervention
- **B.** Biopsy of the lesion
- **C.** Corticosteroid injection
- **D.** Trial another antibiotic (such as doxycycline) for atypical mycobacteria and anti-inflammatory properties

CME Quiz at jamacmelookup.com

Diagnosis

Granuloma faciale

What to Do Next

B. Biopsy of the lesion

Discussion

After biopsy of the lesion, pathology showed a dermal eosinophilic inflammatory lesion suggestive of granuloma faciale (GF). GF is rarely located around the orbit or as an ulcerating lesion as described in this case. GF, first described in a 46-year-old female patient with a lesion appearing on their forehead,[1] has come to be defined as a rare benign inflammatory dermatosis with follicular features and telangiectasia.[2] It typically appears as a well-defined red, brown, or violaceous papule, nodule, or plaque commonly seen in middle-aged White males,[2] commonly arising on sun-exposed areas of the body. The pathophysiology is not fully understood. It may be similar to immunoglobulin G4 (IgG4)–related disease due to its association with vascular inflammation with collections of CD4+ lymphocytes and IgG4+ plasma cells but does not meet the immunohistochemical diagnostic criteria.[3] This epithelial abnormality can appear similar to other dermatologic conditions including abscess, basal or squamous cell carcinoma, other malignancy, sarcoidosis, lupus, or erythema elevatum diutinum,[2,4]

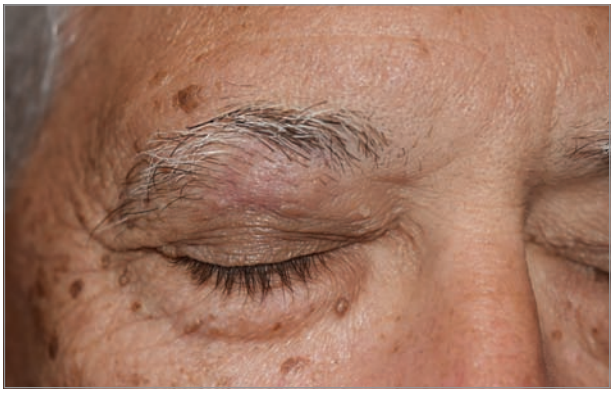

Figure 2. The lesion is largely resolved 3 months after initial presentation.

highlighting the importance of performing biopsies of rapidly growing skin lesions (option B), rather than observation (option A), when the clinical behavior is atypical or when malignancy is suspected.

Unlike this case, most GF lesions have no area of central depression and no ulceration of the overlying epidermis.[4-6] A few other cases have been reported near the orbit.[7-9] In a 66-year-old female patient, the lesion was surgically resected from the tarsoconjunctival surface with no subsequent recurrence.[7] In another report,[8] the lesion was within the tarsal conjunctiva. The patient was treated with dexamethasone eye drops with marked improvement.[8] Chen et al[9] reported a case of an orbital GF associated with eosinophilic angiocentric fibrosis, hypothesizing a connection between the 2 entities. There is no criterion standard care regimen.

Treatment for GF has been variable over the years. Management has included observation, surgical resection, topical glucocorticoids, intralesional glucocorticoid injections, or topical tacrolimus.[7] Other less common options are systemic clofazimine, hydroxychloroquine, tumor necrosis factor α inhibitors, and dapsone (systemic or topical).[9,10] In this case, although injection with corticosteroid (option C) was ultimately used, another antibiotic (such as doxycycline) for atypical mycobacteria and anti-inflammatory properties (option D) was not recommended because it is important to characterize the lesion as either malignant or benign initially, avoiding delayed treatment of more aggressive lesions. Furthermore, corticosteroid injections may decrease biopsy accuracy when associated with localized immunosuppression, atrophy, or pigmentary abnormalities. In summary, GF is an uncommon benign lesion whose pathogenesis remains unclear.

Patient Outcome

After biopsy of the eyebrow lesion, the patient underwent 2 injections of the lesion with corticosteroid (0.3 mL of dexamethasone 10) 1 month apart. After each injection, the lesion improved and has now nearly completely resolved on last follow-up 3 months after initial presentation (**Figure 2**).

ARTICLE INFORMATION

Author Affiliations: Wilmer Eye Institute Johns Hopkins Hospital, Baltimore Maryland.

Corresponding Author: Ashley Anderson Campbell, MD, Wilmer Eye Institute Johns Hopkins Hospital, 600 N Wolfe St, Maumenee 505, Baltimore, MD 21287 (acampb23@jhmi.edu).

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