DOI: 10.1002/cia2.12098

LETTER TO THE EDITOR

Journal of Cutaneous Immunology and Allergy
WILEY

# Inflammatory granuloma mimicking lacrimal sac abscess

*Dear Editor,*

Inflammatory granulomatous lesions on the eyelids are occasionally seen in patients at a wide range of age. Considering its location, the vast majority of such cases are considered to stem from lacrimal gland or duct, as represented by lacrimal sac abscess.[1] However, it is an issue whether individual cases of the eyelid granulomatous lesion are tightly connected with lacrimal gland or duct. Here, we report a patient with a solitary nodule on her medial canthus. Although the lesion mimicked lacrimal sac abscess, there was no association with lacrimal gland. Our case suggests that granulomatous eyelid lesions occur even without connection of lacrimal apparatus.

A 58-year-old Japanese woman presented with a 3-month history of a red nodule on the lower palpebral region. She complained of neither pain, epiphora, mucoid discharge, nor flushing. Clinical examination revealed 8 mm × 10 mm firm,nontender telangiectasis solitary nodule at right medial canthus (Figure 1A). She wore glasses with nose pads every day for 40 years and had no traumatic episode. Differential diagnoses included lacrimal sac abscess, deep mycosis, mycobacterial infection, pseudolymphoma, foreign body granuloma, sarcoidosis, and basal cell carcinoma. Otorhinolaryngologically, no nasolacrimal duct obstruction was noted. Histopathology of a punch biopsy specimen showed granulomatous infiltration of histiocytes, Touton giant cells, and lymphocytes without necrosis (Figure 1B). Her serum Ca and ACE levels were normal, T-spot test was negative, and chest X-ray radiograph was normal. Bacterial culture test was not performed. Treatment with oral doxycycline and diaminodiphenyl sulphone was not effective. She was successfully treated with *triamcinolone* acetonide *subcutaneously injected into* the lesion.

Several differential diagnoses with granuloma can be proposed in this case. A nodule on the medial canthus is generally caused by lacrimal sac abscess with epiphora, and it may show a granulomatous histopathological change. However, our patient did not have epiphora or infectious signs such as pus discharge. Other infectious disorders should be considered, but our cases were efficaciously treated with an intralesionally injected corticosteroid. Although sarcoidosis sometimes shows nodules with epithelioid cell granuloma, our case was not supported by the laboratory data. Granuloma faciale may also present as nodules.[2] However, our case differs from it in the histological absence of the Grenz zone, infiltration of neutrophils, eosinophils, and plasma cells.[2] Finally, although granulomatous rosacea is clinically different from our case, only one atypical case was reported as a solitary indurated plaque on the nose.[3]

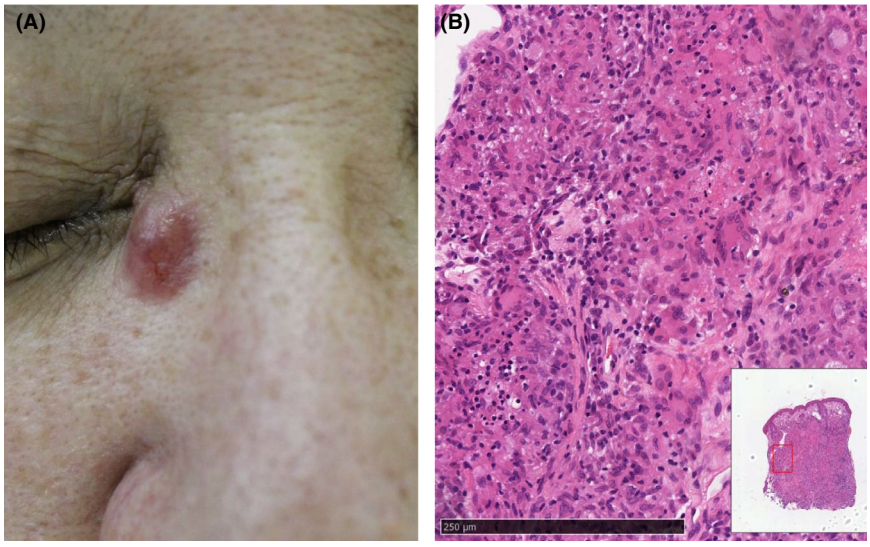


**FIGURE 1** Clinical and histopathological appearances. A, A red nodule on the right medial canthus. B, Histopathology, showing granulomatous infiltration of histiocytes and multinuclear giant cells

Journal of Cutaneous Immunology and Allergy —WILEY— 63

In our case, the granulomatous infiltrate was agglomerated possibly around the pilosebaceous follicles, because many Touton giant cells were present. A role of delayed hypersensitivity reaction against keratinized cells and pilosebaceous structures has been suggested.[4] The solitary nodule was formed on the medial canthus where her nose pad of spectacles was always attached. It is thus tempting to speculate that this case was caused by chronic mechanical stress of spectacles.

## CONFLICT OF INTEREST

The author declares no conflict of interest.

Mizuho Tajima[1,2]
Shinsuke Nakazawa[1,2]
Taisuke Ito[1,2]
Yoshiki Tokura[1]

[1]*Department of Dermatology, Hamamatsu University School of Medicine, Hamamatsu, Japan*
[2]*Section of Dermatology, Morimachi Public Hospital, Morimachi, Japan*

**Correspondence**
Mizuho Tajima, Department of Dermatology, Hamamatsu University School of Medicine, 1-20-1 Handayama, Higashi-Ku, Hamamatsu, Japan.
Email: tajimaaa@hama-med.ac.jp

## ORCID

*Mizuho Tajima* https://orcid.org/0000-0003-0277-1434
*Shinsuke Nakazawa* https://orcid.org/0000-0003-3553-796X
*Taisuke Ito* https://orcid.org/0000-0002-9274-7050
*Yoshiki Tokura* https://orcid.org/0000-0001-7452-6919

## REFERENCES

1. Li EY, Wong ES, Wong AC, Yuen HK. Primary vs secondary endoscopic dacryocystorhinostomy for acute dacryocystitis with lacrimal sac abscess formation: a randomized clinical trial. JAMA Ophthalmol. 2017;135:1361–6.
2. Oliveira CC, Ianhez PE, Marques SA, Marques ME. Granuloma faciale: clinical, morphological and immunohistochemical aspects in a series of 10 patients. An Bras Dermatol. 2016;91:803–7.
3. Batra M, Bansal C, Tulsyan S. Granulomatous rosacea: unusual presentation as solitary plaque. Dermatol Online J. 2011;17:9.
4. Patrinely JR, Font RL, Anderson RL. Granulomatous acne rosacea of the eyelids. JAMA Ophthalmol. 1990;108:561–3.