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CORRESPONDENCE

Successful treatment of cheilitis granulomatosa with diaminodiphenyl sulfone

A 49-year-old woman presented to us with a 5-year history of permanent swelling of the upper lip (Figure 1A). She had neither facial palsy nor a plicated tongue. She did not have any systemic complaints. Physical examinations revealed dental metal allergy of silver bromide, without Crohn's disease, sarcoidosis, focal infection, or any other malignancy. Biopsy specimen was taken from the upper lip. Histopathologically, we diagnosed her illness as cheilitis granulomatosa (CG) (Figure 1B).

Her clinical features were temporarily improved after dental metal removal, but relapsed in a few months. Topical corticosteroid, tacrolimus, and oral anti-histamines were not effective. We started to treat her with oral diaminodiphenyl sulfone (DDS) (75 mg/day), and complete resolution of her clinical feature was observed after 6 months of therapy without any adverse events (Figure 1C).

Melkersson reported a case with facial palsy and orofacial edema in 1928. Melkersson–Rosenthal syndrome was proposed with a triad of persistent lip or facial swelling, recurrent facial paralysis, and fissured tongue by Rosenthal in 1932. Subsequently, the term of CG was firstly described by Meischer in 1945.[1] CG is an uncommon, painless, and recurrent or persistent orofacial swelling histopathologically characterized by noncaseating granulomatous inflammation without any systemic disease.[1,2] Etiology of CG is not established as there have been no comparative trials; however, the involvement of intraoral focal infection, dental metal allergy, food allergy, the participation of the hereditary factors, circulatory disorders, and/or Crohn's disease is generally found in an etiology.[1–3]

Case reports and small case series showed the successful effect of topical or systemic corticosteroids, tranilast, minocycline, clofazimine, hydroxylchloroquine, infliximab, etc on CG.

DDS (also known as dapsone) is essentially used as an antibiotic agent for the treatment of leprosy and is well known for its anti-inflammatory function. DDS is sometimes effective in the treatment of autoimmune bullous diseases such as pemphigus vulgaris.

A few cases of successful treatment for CG using DDS have been reported.[4] Acting on inflammatory cells as granulocytes and mononuclear cells possibly suppresses the inflammation by inhibiting proinflammatory cytokine production.[5]

We should be cautious in adverse events such as DDS syndrome, hemolytic anemia, or Stevens–Johnson syndrome that rarely occur when we use DDS for treating the patients.

In our case, DDS improved the symptoms of CG without any adverse events even though metal removal, topical ointments, and anti-histamines were not effective. DDS has been found to a useful method for the treatment of CG.

DECLARATION SECTION

Approval of the research protocol: N/A.
Informed consent: Informed consent was obtained from the patient.
Registry and registration No. of the study/trial: N/A.
Animal studies: N/A.

CONFLICT OF INTEREST

Dr Manabu Fujimoto is the Editor in Chief for the Journal of Cutaneous Immunology and Allergy. Management of the peer review process, and all editorial decision-making, for this article was undertaken by an Associate Editor.

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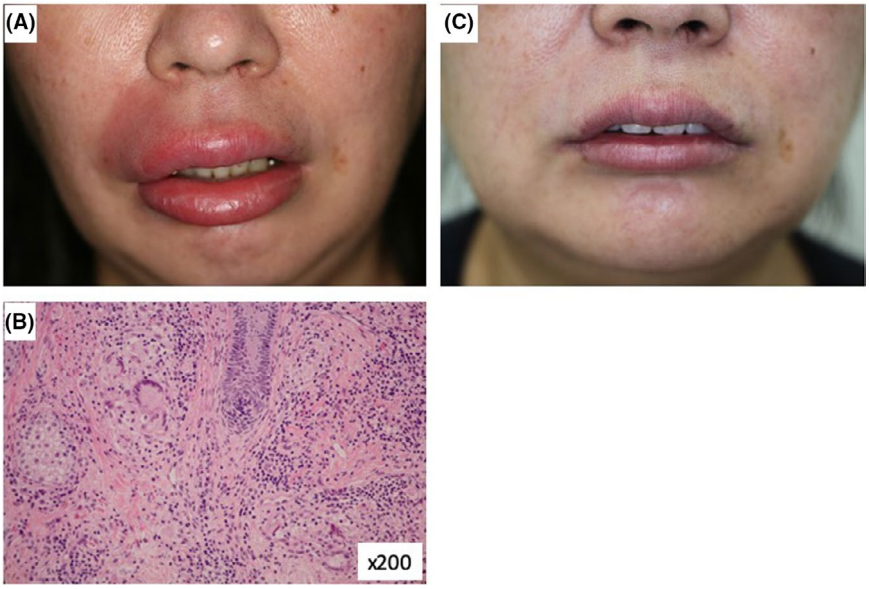

FIGURE 1 A, Clinical feature at the first visit. B, Histopahological examination showing noncaseating granulomatous inflammation in the dermis (hematoxylin and eosin). C, Clinical feature after the DDS treatment

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