Oral mucosal foreign body granulomas in a patient with systemic sarcoidosis

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DESCRIPTION

A 46-year-old woman with biopsy-verified pulmonal sarcoidosis presented with submucosal noduli of the lower lip (figure 1). The noduli had, according to the patient, first appeared 6 months earlier. The lip was tender to traumatic biting and varied in size. The lesion and nearby small salivary glands were removed and the histopathological examination showed non-caseating granulomas in the connective tissue and underlying salivary glands. In several of the granulomas in the connective tissue, polarisable foreign bodies could be observed (figure 2). The patient had 4 years earlier, before the onset of her sarcoidosis, been involved in a bicycle accident where she fell into a pile of stone dust. Due to the characteristics of the histopathological findings, the submucosal noduli of the lower lip was diagnosed as foreign body granulomas, possibly induced by her systemic sarcoidosis.

Cutaneous foreign bodies are generally considered to exclude the diagnosis of sarcoidosis. However, patients with sarcoidosis have a predilection for formation of granulomas also following trauma to the skin, and cutaneous foreign bodies have been described in patients with systemic sarcoidosis.[1] The excessive immune response found in sarcoidosis can be in response to particulate foreign material, and the distribution pattern may be correlated to a higher presence of exogenous material in the lungs or skin compared with other organs.[2] Oral manifestations are rarely encountered,[3] and in this patient, trauma to the lip likely induced formation of non-caseating foreign body granulomas of the oral mucosa due to her underlying systemic sarcoidosis.

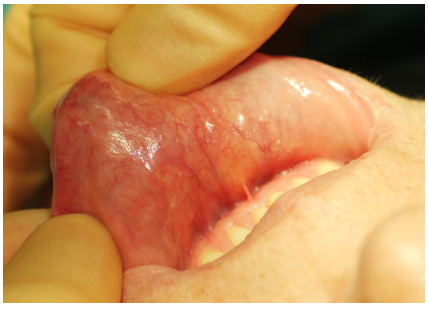

Figure 1 Submucosal noduli of the lower lip were registered with well-vascularised but intact overlying mucosa.

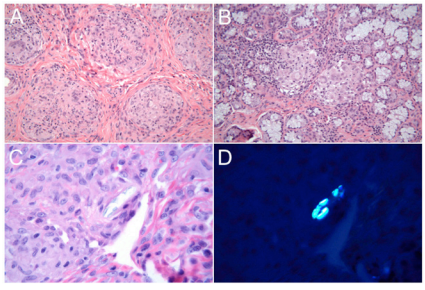

Figure 2 Histopathological examination showed non-caseating granulomas in the connective tissue (A) and underlying salivary glands (B). In several of the granulomas in the connective tissue, polarisable foreign bodies could be observed (C, D).

Patient's perspective

The onset of my symptoms started following the bicycle accident where I injured my face and aspirated stone dust. I was bothered by the hard mass that developed in my lip, and was glad to have it removed.

Learning points

- Trauma to the oral mucosa can induce mucosal foreign body granulomas in patients with systemic sarcoidosis.
- Oral mucosal foreign body granulomas have similar histopathological features as cutaneous lesions.

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