

SHORT COMMUNICATION

Oral Mucosal Lesions in Sarcoidosis: Comparison with Cutaneous Lesions

Marcello Menta S. Nico¹, Ana Lúcia Monteiro Guimarães¹, Paula Yume Sato Serzedello Correa¹ and Silvia V. Lourenço²

¹Department of Dermatology, Medical School, ²Department of Pathology, Dental School, University of São Paulo, Rua Itapeva 500- 3A, CEP-01332-000 São Paulo, Brazil. E-mail: mentanico@hotmail.com

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Sarcoidosis is a multisystemic disorder of unknown cause characterized by non-caseating granulomas. The skin is affected in 20–35% of cases with systemic compromise (1), although exclusively cutaneous sarcoidosis has also been described (1). Diagnosis is frequently first established by a dermatologist. Cutaneous lesions have been well characterized, and commonly consist of papules, plaques (including angiolupoid and lupus pernio) and nodules; rarer forms include ulcerated, lichenoid, atrophic, psoriasiform, ichthyosiform, and vitiligo-like presentations (1).

Oral mucosal lesions of sarcoidosis have been reported only rarely, and most descriptions come from the dental literature (2–5). However, clinical characterization of the lesions has not been properly performed in most of these publications: the lesions are imprecisely described as “masses”, “swellings”, “granulomas”, “gingivitis”, “gingival hyperplasia” or “gingival recession” (2–6). In none of these cases was any attempt made to correlate mucosal and cutaneous lesions. There are no studies comparing oral mucosal lesions of sarcoidosis with their cutaneous counterpart.

METHODS

This study included 5 patients with sarcoidosis who developed specific oral mucosal lesions, who were examined in the Oral Diseases Clinic of the Department of Dermatology, University of São Paulo, Brazil. Cutaneous and mucosal lesions were photographed and biopsied for histopathological studies. Systemic compromise was also studied.

RESULTS

The clinical features of the patients are shown in Table S1¹. There were 3 women and 2 men, age range 33–60 years. Three patients were Afro-Brazilian (patients 2, 3 and 5), 1 mixed-race (patient 4) and 1 Caucasian (patient 1). Two patients presented with nodular cutaneous sarcoidosis, 1 with plaques, 1 with papular, and 1 with infiltrated and atrophic lesions. Oral presentation in all patients consisted of lesions very similar in morphology, shape and size to their cutaneous counterparts (Fig. 1). Lesions were located on the tongue ($n=2$),

lips ($n=2$), gums ($n=1$), retromolar area ($n=1$), hard palate ($n=1$) and soft palate ($n=1$).

Histopathology of cutaneous and mucosal lesions showed typical non-caseating sarcoidal granulomas in all biopsied lesions. Stains for specific microorganisms, as well as microbiological studies, were negative in all patients.

Systemic compromise was detected in all patients: mediastinal or cervical adenomegalies ($n=5$), parenchymatous pulmonary compromise ($n=2$), pleural thickenings ($n=2$), liver and spleen infiltration ($n=1$) and specific dactylitis ($n=1$).

DISCUSSION

Classically, most reports on oral sarcoidosis refer to major or minor salivary glands (7, 8) or osseous compromise; maxillar, mandibular and alveolar bones are most commonly involved (3). Submucosal deep palpable masses have been described (2, 3, 5). Superficial oral mucosal lesions of sarcoidosis have been reported only rarely; most publications refer to single cases (2, 4, 9); only a few series have been published (6).

Bouaziz et al. (6) reported 12 cases of oral involvement in sarcoidosis with histopathological confirmation. In their comprehensive literature review, they found 70 previously published cases; lesions were located on the buccal mucosa ($n=21$), gingiva ($n=14$), palate ($n=6$), lip ($n=11$) and tongue ($n=11$). Multiple sites were involved in 7 cases. Isolated tongue lesions have been described by other authors (9–12).

In all of our patients, sarcoidosis was suspected by examining the skin and oral mucosal lesions; a definite diagnosis was established after the appropriate studies (1). Muco-cutaneous lesions may appear during the course of the disease, but often are the presenting sign (1, 6).

Systemic involvement was detected in all patients; mediastinal adenomegaly was the most common finding. Although the majority of patients with oral sarcoidosis studied previously had visceral lesions (6), some publications report patients with exclusively oral mucosal compromise (9, 10).

The cases reported here strongly reinforce our opinion that oral mucosal lesions of any cause are better understood when compared with their cutaneous counterpart, since oral mucosal lesions almost always mimic the aspect of skin lesions even in the absence of these (13,

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Fig. 1. (A) Patient 1: papules and nodules on the bridge of the nose. (B) Each round de-papillated area on the anterior third of the tongue is, in reality, a pea-sized, palpable, firm nodule. (C) Patient 2: exuberant nodules on the cheeks and bridge of the nose. (D) Similar nodules on the hard and soft palate. (E) Patient 3: coalescing nodules on the ala nasi and vermillion. (F) Similar nodule on the tip of the tongue; (G) Patient 4: multiple linearly arranged papules. (H) Similar arrangement of lesions on the vermillion area. (I) Patient 5: coin-shaped infiltrated violaceous plaques with depressed yellowish centre near the left inner canthus. (J) Intensely atrophic yellowish plaque on the gingiva.

14). This also seems to be the case with sarcoidosis. The application of this concept in the diagnosis of oral mucosal lesions may be a useful clinical tool for dermatologists and other health professionals involved in oral care.

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