SARCOIDOSIS VASCULITIS AND DIFFUSE LUNG DISEASES 2024; 41 (4): e2024062 DOI: 10.36141/svdld.v41i4.15860

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## Mandibular and periodontal involvement in sarcoidosis

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## **CASE PRESENTATION**

While pulmonary involvement is most commonly seen in patients with sarcoidosis, up to 30% of patients can present with extrathoracic manifestations of sarcoidosis (1). Oral manifestations of sarcoidosis are rare and can include involvement of the buccal mucosa, tongue, gingiva, and palate with nodules, swelling, ulceration, plaques, or fistulous tracks (Figure 1). Mandibular and maxillary involvement have also been seen, though rarely. Here we describe this uncommon presentation in order highlight this rare and often nonspecific finding as a potential manifestation of oral involvement of sarcoidosis.

The true incidence of oral and interosseous manifestations of sarcoidosis is unknown. A 2005 literature review by Suresh et. al. reviewed 47 cases of histopathologically confirmed sarcoidosis of the oral mucosa, and 21 of the facial bones. The jawbone was the most affected site, followed by buccal and gingival mucosae. In prior reports, interosseous manifestations of sarcoidosis may precede development of pulmonary and extrapulmonary manifestations of sarcoidosis by years (5,7). In those with osseous manifestations, they most commonly present with findings of bony erosion or lytic lesions on imaging and are often

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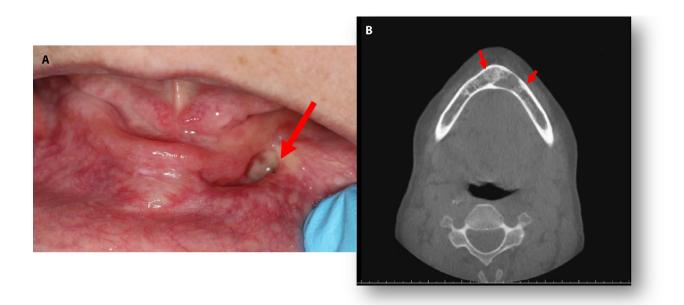
asymptomatic (Figure 1B). Symptomatic patients may report loose teeth, non-healing sockets, pain in the jaw or referred to the ears. Potential bone destruction and progression of non-healing sockets can then lead to the formation of fistulous tracts (Figure 1A) (2–7). Biopsy of these lesions is often needed to differentiate possible sarcoidosis from alternative differential diagnoses including neoplasm, chronic infection, or aggressive periodontitis. However, in patients who carry a diagnosis of sarcoidosis, some radiographic findings may be more suggestive of sarcoid involvement including cortical preservation of the lytic lesion (4). Treatment with corticosteroids often results in symptom improvement and often leads to remission of oral manifestations, however with discontinuation of therapy, these manifestations tend to reoccur and can sometimes be accompanied by new or recurrent manifestations of sarcoid in other organ systems. Often, repeated treatment with immunosuppression is then required (4–8). Few studies have compared those with oral manifestations of sarcoid to those without oral involvement. Though one review of 12 patients showed a trend toward younger age at presentation with an increased likelihood of co-occurring respiratory tract and lacrimal and salivary gland involvement of their disease (5). Sarcoidosis is a multisystem granulomatous disorder with a wide range of presentations. Oral involvement of the disorder is infrequently reported and may be underrecognized given it is often asymptomatic and lesions can resolve with the start of treatment for other manifestations of disease. It is important to note this infrequently described presentation to prompt practitioners to consider sarcoidosis in the differential diagnosis of these patients for which oral involvement is their initial presenting symptom.

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**Figure 1.** (A) Lower mouth picturing the lower frenulum and laterally positioned left sided oral ulceration (red arrow) with fistulization to the mandible. (B) Transverse cut of a CT head in bone window revealing bilateral mandibular bony erosions (right greater than left, red arrows).

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