Oral Focal Mucinosis: A case report

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Oral Focal Mucinosis: A Case Report

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ABSTRACT
Aim: Oral focal mucinosis is a rare lesion with less than 60 cases reported in English literature so far, to the best of our knowledge. It is considered to be the oral counterpart of cutaneous focal mucinosis and/or cutaneous myxoid cyst. Histopathologically, Oral focal mucinosis is demonstrates a well-circumscribed area of myxomatous connective tissue containing mucinous material, surrounded by denser collagenous connective tissue. We present a case of Oral focal mucinosis occurring on the buccal gingiva of the lower jaw.

1. INTRODUCTION
Oral focal mucinosis (OFM) was first described by Tomich in 1974 who reported 8 cases as the oral counterpart of cutaneous focal mucinosis (CFM) resulting from local hyaluronic acid overproduction by fibroblasts (1, 2). Over the years cases have been reporting OFM, some of which are retrospective reports. There are no distinctive features for these lesions clinically or radiologically. The mucosa directly overlying bone appears to be particularly vulnerable, with gingiva being the most common site followed by hard palate. It presents as a painless, sessile or pedunculated mass of the same color as the surrounding mucosa and skin lesions do not seem to accompany oral lesions. OFM occurs predominantly in adults during the fourth and fifth decade of life, although it has been reported infrequently in children and adolescents (3). It is described to occur more commonly in females. The review of available literature shows that it is most commonly diagnosed as fibroma or epulis, thus, the histopathological diagnosis becomes important in these conditions due to its lack of pathognomonic features (4).

Histopathologically, OFM is characterized by a well-circumscribed area of myxomatous connective tissue containing mucinous material, surrounded by denser collagenous connective tissue (5). In this report, we present a case of OFM occurring on the buccal gingiva of the lower jaw.

2. CASE PRESENTATION
A 48-year-old Egyptian woman referred to our hospital in February 2022 with a chief complaint of swelling in the alveolar region of a mandibular premolar area, area of tooth number 20. The patient reported that the lesion started about a year earlier and kept enlarging gradually and she denied any history of trauma. Intraoral examination revealed a soft tissue swelling on the alveolar mucosa of tooth number 20 and extending posteriorly to the edentulous mucosa. The mucosa overlying the swelling exhibited normal color and texture (Fig. 1a).

The lesion was clinically diagnosed as a fibroma. An excisional biopsy was performed to excise the tissue which was stored in 10% formalin and sent for histopathological examination (Fig. 1b).

Histopathological examination of the Hematoxylin and eosin-stained biopsied tissue revealed a stratified squamous parakeratinized epithelium. The underlying connective tissue stroma comprised loose fibrillar myxoid stroma with stellate fibroblasts. Myxoid areas exhibited delicate collagen fibrils separated by mucinous material. Occasional findings were focal areas of a lymphocytic inflammatory infiltrate (Fig. 1c, 1d and 1e).
3. DISCUSSION

OFM is an uncommon mucosal condition, it is considered to be the oral counterpart of CFM or cutaneous myxoid Cyst. Although the etiology of OFM is unclear, it is distinguished by the local deposition of mucin in connective tissue where mucoid degeneration has occurred (1;4). According to reports, keratinized mucosa covering bone is where OFM is most likely to develop (1); instances of gingival and palatal origin together comprise around 79% of the recorded cases.

Even though the exact etiology is still elusive, trauma has been proposed to take part in OFM development yet, to date, no clear-cut association has been made (5; 3). OFM is usually seen on the gingiva and the hard palate as a sessile, painless nodule with normal surface mucosa however, sometimes the color may appear somewhat pale. OFM does not have any pathognomonic clinical features for diagnosis, the clinical impression is usually that of a fibroma (like our case), pyogenic granuloma or mucocele. The diagnosis is predominantly histopathological (1;4).

Under the microscope these lesions exhibit loose myxoid tissue intermingled with fibroblasts and a delicate fibrillar stroma. Inflammation is not a prominent feature; however, inflammatory cells may occasionally be seen around blood vessels within the myxoid stroma. Atrophy and flattening of the rete ridges of the overlying epithelium are commonly noted (6; 7).
Histopathologically, these lesions may be differentially diagnosed with myxomas, mucoceles or nerve sheath myxoma owing to the presence of myxoid tissue in all the above-mentioned entities. However, OFM, lacks reticular fibers and despite the lack of encapsulation, it does not invade the surrounding tissues like myxoma does. Neither does the OFM show granulation tissue like that seen in mucoceles. Moreover, OFM can be differentiated from nerve sheath myxoma, as the latter shows frequent mast cells organized in a lobular pattern as well as S-100 immunopositivity, which are not features of OFM (7; 4).

4. CONCLUSION

OFM is an uncommon condition that can be challenging to clinically detect. For a precise diagnosis to be made, histopathological analysis is essential. This study is a case report of an OFM that was located on the buccal mucosa of the posterior mandible and extended over the edentulous mucosa.

5. REFERENCES


