JOURNAL OF CLINICAL RESEARCH IN ORAL AND MAXILLOFACIAL SURGERY AND EDUCATION (JCROME)

CASE REPORT

A Rare Case Of Dermatofibroma in Maxilla - Case Report and Treatment Considerations

[1]Dr Rangila Ram, [2]Dr Narotan Ghzta, [3]Dr Akshay Shinde, [4]Dr Santosh Sharma and [5]Razi Ahsan

[1]MDS, (Oral And Maxillofacial Surgery), [2]MDS (Oral and Maxillofacial Surgery), [3,4,5]Junior Resident, Department of Oral and Maxillofacial Surgery, Government Dental College and Hospital, Shimla, Himachal Pradesh, INDIA

Keywords: : Dermatofibroma; maxilla; mesenchymal tumor.

Corresponding author

Dr Rangila Ram
Set no.-3, Dental Doctor Residence-Hollyoak Sanjauli, Shimla Himachal Pradesh (India). 171005
Email: drramomfs@gmail.com

ABSTRACT

Exostoses of maxilla are nodular protuberance that need to be accurately distinguished from other diagnostically significant lesions. Dermatofibroma is rare benign fibrous neoplasm mainly involving skin & rarely found in oral cavity. We report a very rare case of Dermatofibroma in a 52- year old female who presented with a well-circumscribed, non tender, asymptomatic swelling in the maxillary anterior region.

INTRODUCTION

Dermatofibroma are common cutaneous lesions, characterized by well circumscribed, round/ovoid hyper pigmented, solitary or multiple nodules ,usually less than 1 cm. in diameter. Dermatofibroma are usually asymptomatic, although pruritis and tenderness are not uncommon. The lesion is adherent to the overlying epidermis, which may be indented from pressure leading to dell-like depression (dimple sign)(1) . Multiple etiological factors have been attributed for its development(2). It is more frequent in males & peak incidence is in the fifth decade of life (3, 4). Till date only one case of dermatofibroma involving oral cavity (maxilla) has been reported(5). We report a rare case of dermatofibroma which involves exclusively the oral mucosa without any sign & dermatologic involvement.

Case Report: -A 52 year old female was referred to our out-patient clinic with the chief complaint of swelling in the oral cavity which persisted for the last 18 months and resulted in facial asymmetry,

Figure 1a

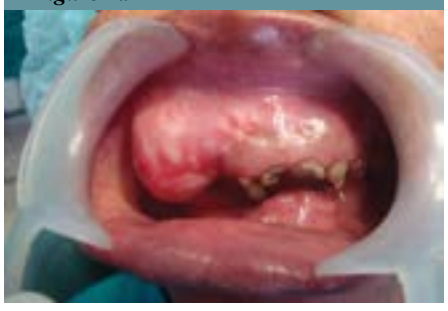


Figure 1b

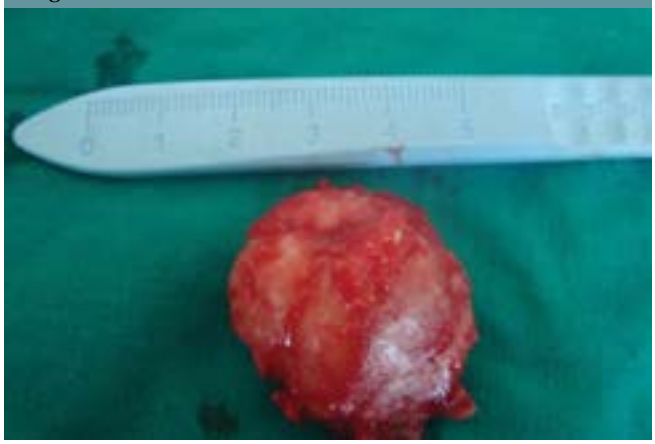


Figure 2

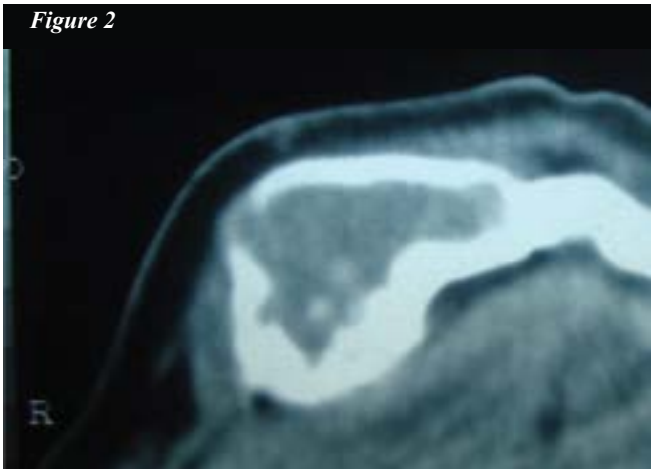


Figure 3 a

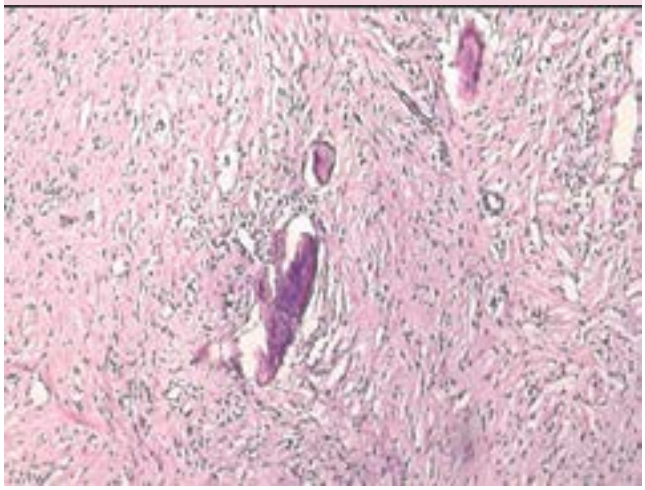
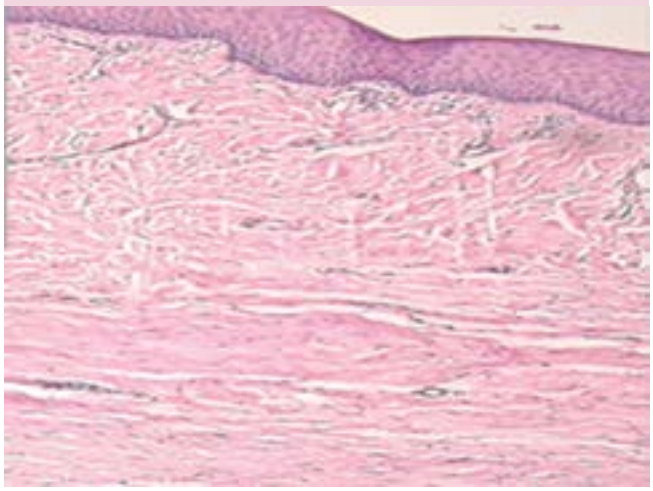


Figure 3 b



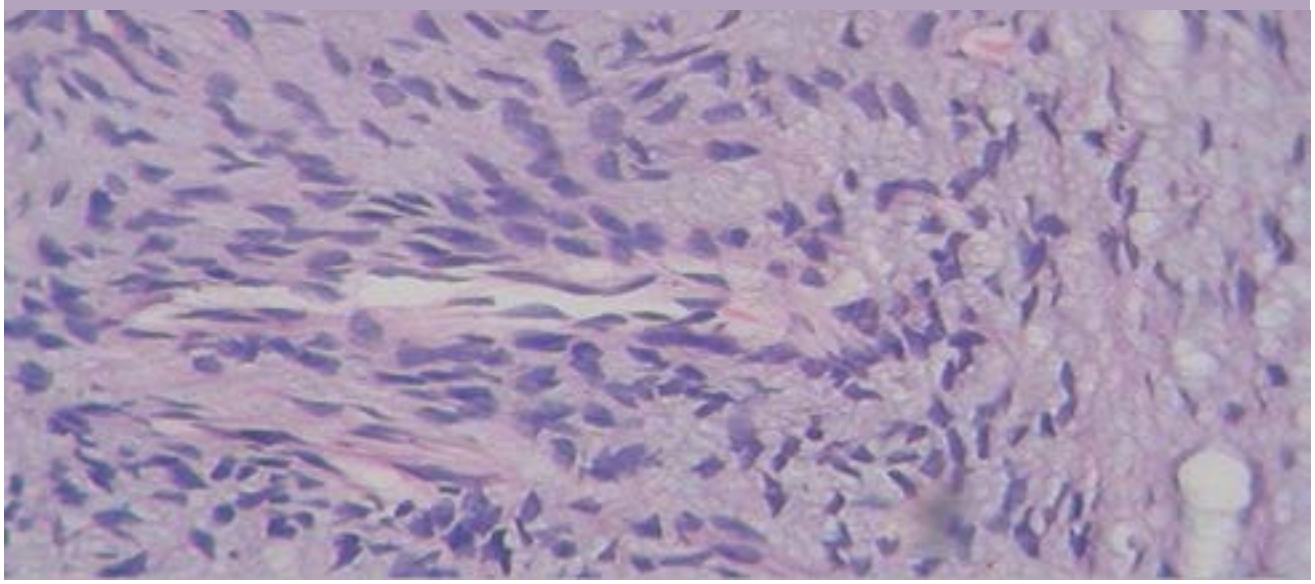
difficulty in swallowing and restricted tongue movement during speech. On intra oral examination a painless nodule of 3x3 cm in diameter was recognized (fig.1a) extending from the central incisor region to premolar region on the right side of maxilla. The appearance of the overlying mucosa was normal. Axial computed tomography scan revealed expansion of the labial & palatal cortex with multiple perforations of cortex. (fig. 2) Right maxillary sinus was normal. Laboratory data were within the normal range. Excision of lesion was done under local anesthesia by creating a bony window under a clinical diagnosis of benign mesenchymal tumor. The excised lesion (fig. 1b) was sent for histopathological examination.

Histopathological examination

Histologically, the lesion showed dense proliferation of histiocytic and spindle shaped tumor cells which were arranged in a prominent "whorled" or "storiform" pattern. There was diffuse lymphocytic infiltration in the tumor stroma along with collagen deposit with hyaline and myxoid areas ("collagen trapping").All these features are characteristic of dermatofibroma (fig. 3a,b,c)(6,7).

Frequent mitosis and especially atypical ones are sign of malignancy, which occur very rarely in dermatofibroma. Complete surgical excision is the treatment of choice, recurrence of dermatofibroma is uncommon. In conclusion, dermatofibroma must be considered in differential diagnosis of intraoral swelling. In this case physical examination and radiologic studies were in favor of bony exostosis, emphasizing the necessity of pathologic examination in all intraoral masses. Meanwhile, the pathologist should consider this rare tumor, in addition to rarity, it is also a difficult pathologic diagnosis.

Figure 3 c



DISCUSSION

Dermatofibroma has been recently defined as a fibrosing cutaneous lesion characterized by an increased numbers of fibrocytes, a variable mixture of macrophages and other inflammatory cells including lymphocytes and rarely eosinophils, neutrophils, and/or plasma cell, with coarse collagen bundles in haphazard array often with peripheral entrapment and hyperplasia of adjacent structures(5). The frequency of their presentation in the skin does not imply, however, that we fully understand their nature (neoplasia v/s reactive process), their cell of origin (Dermal histiocytes v/s fibroblast) or their relationship with other dermal tumors. Proof of this ambivalence is the multiple synonyms used to describe them, including benign fibrous histiocytoma, histiocytoma cutis, sclerosing haemangioma and nodular subepidermal fibrosis. It accounted for 15% of benign soft tissue tumors and less than 5% of all neoplastic diseases in the head and neck. Clinically, it appears mainly as a lump in soft tissue, so it is difficult to distinguish from other benign tumors due to scarcity of clinical feature. Although earlier literature reports the presence of dermatofibroma in jaw bones(6), lip, tongue and buccal mucosa but the data is scarce(7).

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