CASE REPORT

RARE CASE OF BENIGN FIBROUS HISTIOCYTOMA IN BUCCAL MUCOSA: A CASE REPORT

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ABSTRACT

Fibrous histiocytoma is a lesion that may be present anywhere in thehuman body. Involvement of the oral cavity is quite unusual and has very few instances. We are reporting a case of benign fibrous histiocytoma in the buccal mucosa of a 3 year old child. The clinicopathological features of the lesion as well as its management has been discussed in this article.

KEY WORDS

Benign fibrous histiocytoma, soft tissue tumour, oral cavity.

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INTRODUCTION

Fibrous histiocytoma is an uncommon lesion in the oral cavity. Literature reports of fibrous histiocytoma may present as malignant fibrous histiocytoma or benign fibrous histiocytoma (BFH). It appears as a painless swelling that may enlarge gradually and exceed 10 cm in its size. Commonly affected sites include upper and lower extremities, abdomen, head and neck region.[1,2] Latest technological measures such as immunohistochemistry allows the pathologist to discriminate between benign and malignant versions of fibrous histiocytoma. It has a male predominance of 2.5:1 and occurs more commonly in adults with a mean age of 40 years.[5,6] Clinically it appears as a painless swelling which may enlarge gradually and may exceed 10 cm in its greatest dimension. CT scan and MRI can be performed to exclude soft tissue and hard tissue involvement respectively.[3,4] Surgical excision remains the treatment of choice for oral BFH. The recurrence rate is low to negligible and the prognosis is good with respect to oral BFH. Metastasis of the oral BFH has not been reported.[5,6] Long term follow-up is recommended. This article describes the clinical and histopathological features of oral benign fibrous histiocytoma of a patient who was treated in our institution.

CASE REPORT

A 3-year-old patient reported to department of oral and maxillofacial surgery of our institute with a complaint of swelling in4 the right cheek region for last 3 weeks. His parents reported that he had a toothbrush trauma 1 month back. On extraoral examination there were no significant findings. Intraoral examination revealed the presence of a solitary spherical lesion in the right buccal mucosa in relation to the deciduous molars and canines. It was not associated with pain, pus discharge or any ulceration. On palpation, the lesion measuring approximately 1.0 by 1.0 cm, was mobile and of a firm consistency. The overlying mucosa appeared similar to that of adjacent healthy mucosa. No regional lymph nodes were palpable.

The lesion was excised in toto under sedation and sent for histopathological evaluation. Primary

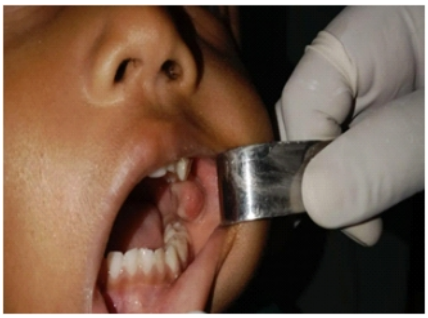

Fig.1 Pre-op intraoral photograph

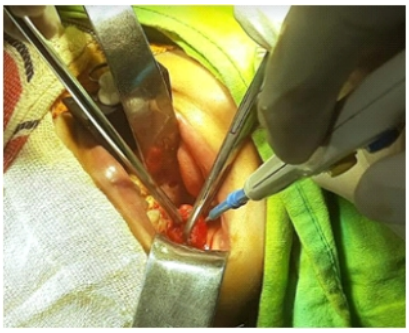

Fig.2 Intra-oral photograph during excision.

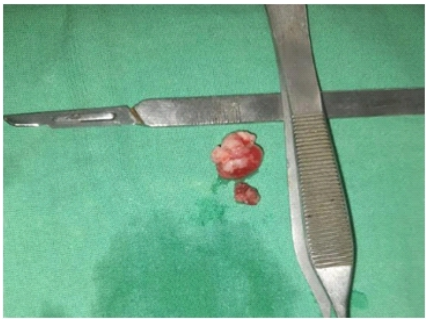

Fig.3 Specimen before Histopathologic evaluation

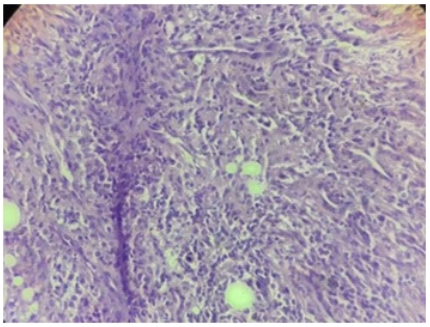

Fig.4 Histopathological picture

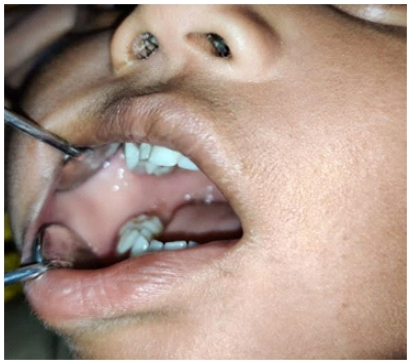

Fig.5 Patient on 21st post operative day.

closure of the defect in the buccal mucosa was done with 3-0 vicryl. Post-operative healing was uneventful. The specimen consisted of an encapsulated mass measuring 1.0 by 1.0 cm in maximum dimension. Macroscopically the lesion was yellowish-white in colour with focal areas of haemorrhage. The consistency of the lesion was firm. Histopathological evaluation revealed the presence offibro cellular tissue predominantly consisting of rounded histiocytes of varying sizes and spindle shaped cells with elongated nuclei arranged irregularly and occasionally in a storiform pattern. Focal areas of mitotic activity were also observed with chronic inflammatory cells, predominantly lymphocytes. Intermingled connective tissue consisted of mature bundles of collagen fibres with areas of hyalinization and myxoid changes. Peripherally the connective tissue was predominantly infiltrated by lymphocytes.

DISCUSSION

The lesion we observed was well defined and present in buccal soft tissue. Chronic irritation, continuous trauma and spontaneous development have been reported for those located within the oral cavity. The clinical diagnosis of oral BFH is made by a gradually enlarging mass, that is well-circumscribed and does not show aggressive behaviour or damage overlying mucosa.[7] However clinically, the differential diagnosis with other soft tissue neoplasms is not possible. The differential diagnosis includes traumatic fibroma, and neurofibroma. In the soft tissues of the oral cavity the principal lesion that requires a histopathological differential diagnosis from BFH is malignant fibrous histiocytoma (MFH). The histological pattern of MFH includes highly pleomorphic cells, high mitotic activity and infiltration of the capsule into the

surrounding tissue.[8,9] Immunohistochemistry patterns include a high positivity for vimentin, CD38, factor XIIIa.[1,3] In the case presented, the neoplasm was well defined on clinical examination and there were no signs of local invasion. Since the size of the lesion was 1cm in greatest dimension at the time of initial presentation, we went for excisional biopsy of the lesion with wide margins. The prognosis of oral BFH is very good. Metastases have not been reported. Local recurrence is present when the excision is incomplete. Postsurgical histological report confirmed the diagnosis of oral BFH, which was successfully diagnosed and managed by surgical excision. The patient was followed up for 1 month and surgical site healed uneventfully.

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