A RARE CASE OF BENIGN FIBROUS HISTIOCYTOMA IN THE SUBMUCOSAL SOFT TISSUE OF HARD PALATE : A CASE REPORT AND REVIEW OF LITERATURE

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Abstract

Benign fibrous histiocytoma is a benign soft tissue tumor commonly seen in the skin extremities. It can arise as a soft tissue mass anywhere in the human body, but involvement of the oral cavity is very rare. Here we present a case of benign fibrous histiocytoma involving the posterior region of the hard palate.

Keywords: Benign fibrous histiocytoma, mesenchymal tumor

Introduction

Benign fibrous histiocytoma is a mesenchymal tumor that exhibit fibroblastic& histiocytic differentiation. This tumor is most frequently found in the dermis in the extremities but other soft tissue sites may be involved less frequently, commonly found in older or middle aged adults. The tumor presents as a painless nodular subcutaneous mass. As a result of the highly variable nature of this lesion, this condition is also known by a number of names such as dermatofibroma, sclerosing hemangiomia, xanthogranuloma, fibro xanthoma & nodular sub epidermal fibrosis. This article describes a case of Benign Fibrous Histiocytoma of the hard palate along with its clinical and histo-pathological characteristics & treatment modalities.

Case Report

A twenty year old female reported to the Dept of Oral medicine and radiology with a swelling in the left palatal region of sudden onset. She gave a history of fish thorn inflicted trauma about two weeks back followed by intermittent pain and swelling. She had been to a local surgeon who prescribed antibiotics and analgesics on which the symptoms subsided.

On examination a well circumscribed oval, soft to firm swelling of size 3x3 cm in the hard palate medial to 25, 26 & 27 (figure-1) .The patients was sent for routine blood and radiographic examination which was found to be normal.

Incisional biopsy was done in the Dept of Oral surgery and the formalin fixed specimen sent to our department for histopathologic examination. It showed fusiform fibroblasts with vesicular nucleus arranged in a streaming fashion (storiform pattern).Chronic inflammatory cells are found scattered through out the tumor (figure-2&4). Focal areas of metaplastic osteoid formation were also noticed (figure-3).Once the diagnosis was made the patient was referred to the Regional cancer centre, Thiruvananthapuram

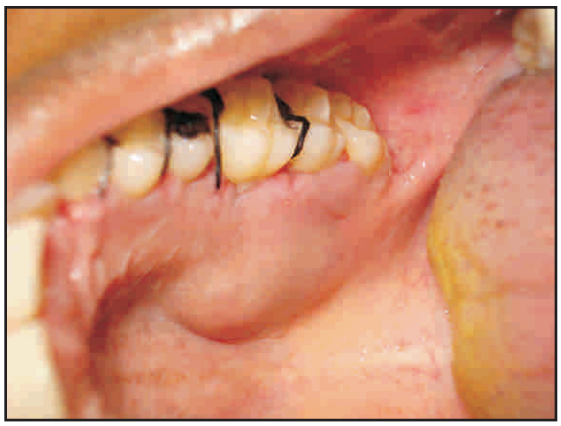

Fig 1

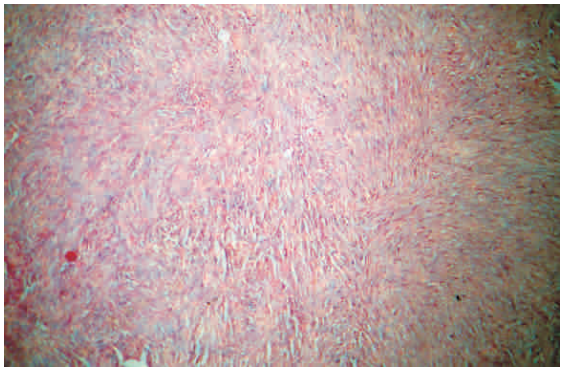

Fig 2

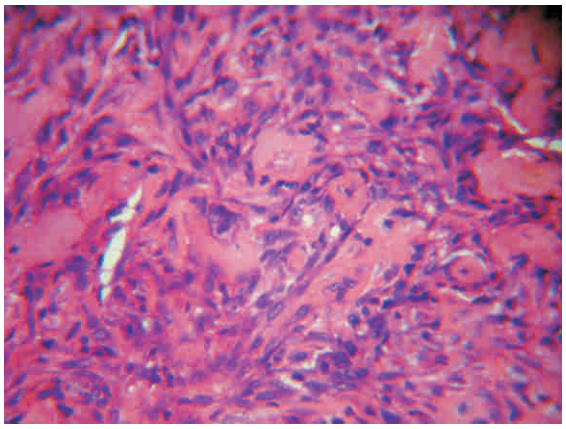

Fig 3

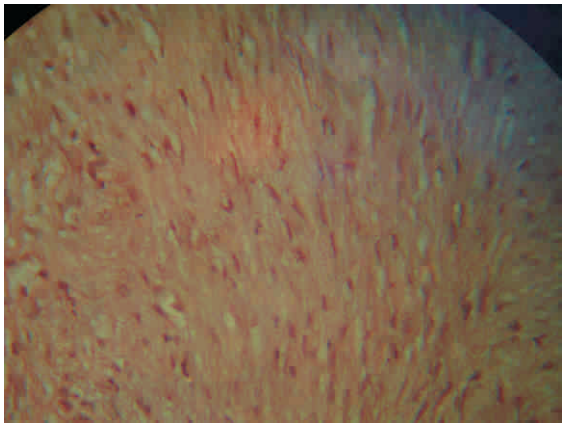

Fig 4

Discussion

Benign fibrous histiocytoma is a benign soft tissue tumor of uncertain origin arising as a fibrous mass anywhere in the human body. The cell of origin is thought to be histiocytes which may assume fibroblastic characteristics. Most common site is the dermis of lower extremities in middle aged adults. Involvement of the oral cavity is rare, but when occurs, the frequent sites are the buccal mucosa and the vestibule.

There is a long standing controversy as to whether it is neoplastic or reactive. Some physicians and researchers believe that benign fibrous histiocytoma forms as a reactionary change to previous injuries such as insect bites or thorn pricks.

The lesion presents as a slow growing, painless, non-encapsulated and often pigmented sub mucosal nodule. The tumour varies in size from a few millimeters to several centimeters in diameter. Rare intrabony lesions of the jaws have also been reported. Histologically the tumor is composed of uniform spindle cells with ill defined eosinophilic cytoplasm and bland elongated or plump vesicular nuclei with no atypia. Scattered/ foamy histiocytes or Touton type multinucleated giant cells may be seen. A background stoma of variably dense collagenous connective tissue with variable vascularity is seen. The spindle cells may be arranged randomly but usually there are large areas with tumor cells streaming in interlacing fascicles from a central nidus and intersecting with cells from adjacent aggregates, imparting a storiform or crisscross pattern on low power magnification. The fibrous histiocytoma is poorly demarcated from surrounding tissues. Chronic inflammatory cells especially lymphocytes, are usually scattered throughout the tumor in small numbers. Deeper lesions may contain focal areas of dystrophic calcification or metaplastic osteoid.

Tumor cells are positive for vimentin, factor XIIIa and negative for lysozyme, Ki-67, bcl2, CD 34 & CD 68. Under differential diagnosis nodular fasciitis, myofibroma, palisading encapsulated neuroma, neurofibroma, leiomyoma and the spindle cell type of myoepithelioma etc should be considered. Wide surgical excision is the treatment of choice. Recurrence is not a common finding (5-10%) for superficial tumors. Larger and deeper lesions do have a higher rate of recurrence. The biological behavior of this tumor is unpredictable and hence a regular follow-up is recommended after surgical excision.

Conclusion

Benign fibrous histiocytoma is a benign soft tissue tumor. This tumor has histologic resemblance to a number of other soft tissue tumors. It is important that we differentiate this tumor from the aggressive forms of fibrous and histiocytic origin such as dermatofibrosarcoma protuberans, malignant fibrous histiocytoma and fibro sarcoma.

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