

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Fibrohistiocytic Tumor Of Tongue: A Rare Case Report.

Parag Narkhede<sup>1\*</sup>, Sangram K Das<sup>2</sup>, and Meher Keerthana<sup>3</sup>.

<sup>1</sup>Assistant Professor, Department of ENT, MGM Medical College and Hospital, Aurangabad, Maharashtra, India.

<sup>2</sup>Junior Resident, Department of ENT, Department of ENT, MGM Medical College and Hospital, Aurangabad, Maharashtra, India.

<sup>3</sup>Junior Resident, Department of ENT, Department of ENT, MGM Medical College and Hospital, Aurangabad, Maharashtra, India.

### ABSTRACT

As we know the word neoplasm includes both benign and malignant growths and Malignancy often gives its identity clinically by rapid growth and adjacent annihilation. But certain benign tumors do the same where the locally aggressive nature leads to complete excision being left as the only treatment modality. An unusual presentation by a 29 years old male with a mass which looked exactly the same as the morphological features exhibited by the human tongue growing rapidly to attain the same size of it as well resulting in difficulty in speech and chewing movements along with cosmetic concerns. The patient was taken up for excision of the mass bearing in mind to retain the normal anatomy and functionality of the tongue being cognizant about avoiding the recurrence.

**Keywords:** Fibrohistiocytic tumor, neoplasm

<https://doi.org/10.33887/rjpbcs/2023.14.1.18>

*\*Corresponding author*

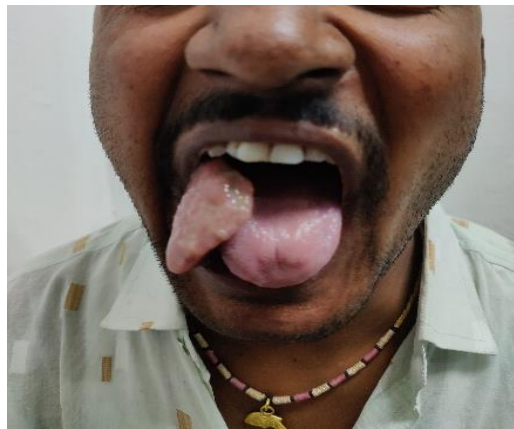
## INTRODUCTION

As we know the word neoplasm includes both benign and malignant growths and Malignancy often gives its identity clinically by rapid growth and adjacent annihilation. But certain benign tumors do the same where the locally aggressive nature leads to complete excision being left as the only treatment modality. Fibrohistiocytic tumor as the name tells is a tumor which is composed of both fibroblastic and histiocytic cells. It can occur in any part of the body but as per the literature it most commonly affects the extremities of the human body and the involvement of oral cavity is rare. Importance of this tumor is to differentiate it from its more aggressive morphological variants including dermatofibrosarcoma protuberans and malignant fibrous histiocytoma which can lead to serious complications even after excision. Timely diagnosis, necessary investigations and aggressive surgical approach always benefits the current and the future scenarios. The clinical and histological diagnosis, treatment, and prognosis have been discussed [1-3].

## CASE REPORT

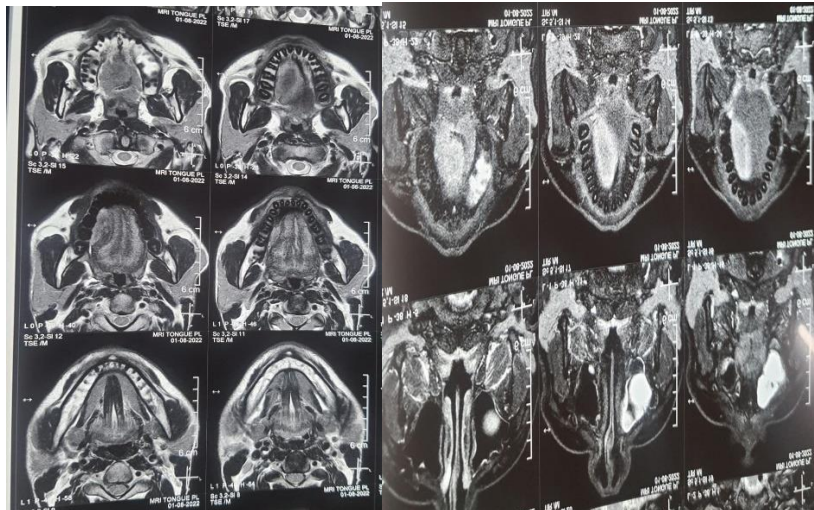
A 29/M presented to the OPD in the department of ENT with complains of a mass arising from the right side of tongue since last 1 year which was sudden on onset and gradually progressive in nature with increase in size each passing day. It was associated with difficulty in tongue movements resulting in slurred and difficulty in speech. It was painless and was pinkish in color with a stalk attached to the right lateral border of tongue, It was similar in morphological features with that of the tongue.

The patient was examined and gave a detailed history where it was noted about no history of addictions and no history of previous occurrence of this growth.



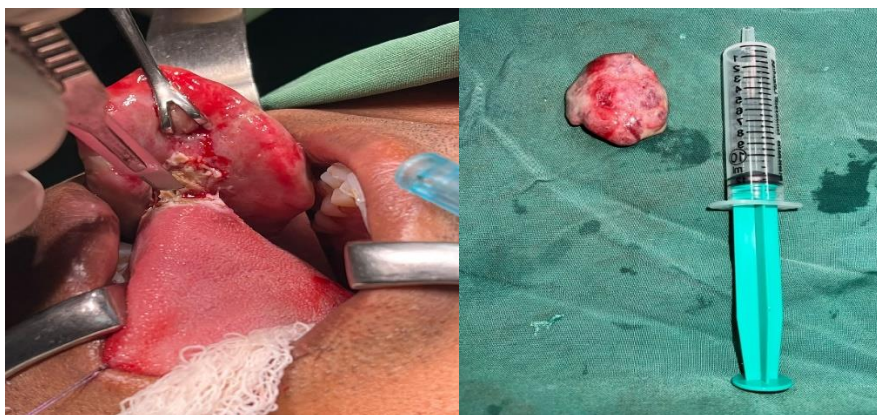
Patient was planned for wide local excision under General anaesthesia and the mass was to be removed in toto and was to be sent for histopathological examination followed by Immunohistochemistry if required.

MRI tongue was the mainstay for diagnosis for which the following images are added below, Reporting was done and the diagnosis was given as: **Well defined altered signal intensity lesion along the right lateral border of anterior 2/3rd of the tongue having small continuity with anterior 2/3<sup>rd</sup> of tongue on right side, suggestive of Benign aetiology –PAPILLOMA.**



**MRI Images showing the mass on the right side of lateral border of tongue**

A biopsy specimen of the size 7-8 cm in diameter was obtained after wide local excision and removal of mass in toto, intraoperative bleeding was minimal, suturing done with absorbable suture material was done. Post operative period was uneventful.



**Image showing wide local excision of the mass measuring around the above mentioned picture and was sent for histopathology**

Sections studied reveal ulcerated lining epithelium. Underlying extensive granulation tissue composed of proliferating blood vessels, inflammatory infiltrate and multinucleated giant cells is seen. Subepithelium shows fibrous stroma revealing a malignant mesenchymal tumour. The tumour cells are arranged in pattern-less pattern. The tumour cells are spindle shaped and few of them show bizzare morphology. The cytoplasm is moderate eosinophilic with pleomorphic, oval to elongated vesicular nuclei having prominent nucleoli.

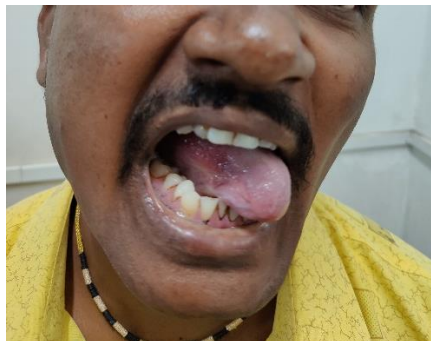
**DISCUSSION**

The fibrous histiocytoma is a soft tissue neoplasm that affects the dermis and the subcutaneous tissue, rarely is found in the oral cavity and perioral regions, and is originated from the proliferation of fibroblasts and histiocytes. The histopathological examination revealed a non-encapsulated proliferation of spindle cells with some giant multinucleated cells in the periphery of the lesion. Immunohistochemical reactions were performed, staining only for vimentin in the spindle cells and for CD68 in the multinucleated giant cells.

Prior to these, the most important aspect of finding a leading diagnosis for any tongue mass is a proper radiological investigation in terms of Decision and further proceedings.

The fibrous histiocytoma do have challenged vascularity and hence do not show any enhancement in CT . Surgical excision of the tumour is the treatment of choice. Radiotherapy could be used for unresectable and surgically unapproachable site lesions. Major histopathological variants of these are cellular, epithelioid and aneurysmal (angiomatoid). Clear cell change, palisading of nuclei, myxoid change, lipidization (ankle - type), giant cell formation and granular cell change can be attributed to the minor variants. In spite of enhanced cellularity and level of mitotic activity, it is still considered benign and nuclear atypia in the tumor cells may be displayed on a degenerative basis. Depending upon the cellularity and morphological variations, wide array of histopathological differentials exists for BFH, which includes nodular fasciitis, solitary fibrous tumor (SFT), neurofibroma, leiomyoma and malignant fibrous histiocytoma. Nodular fasciitis is a poorly circumscribed lesion consisting of short irregular fascicles of fibrous tissue, separated by a myxoid stroma and mitosis is frequent.

SFT is a rare mesenchymal tumor of the oral , which can overlap histologically with BFH by having features such as circumscription, storiform pattern, sclerosis, neural type palisading, and hemangiopericytoma like areas. In BFH, uniformly hypercellular areas are seen and the storiform pattern is wide spread with less frequent sclerosis. [ in SFT, histiocytic differentiation is absent and alternating hypo and hyper cellular areas are seen. immunohistochemically, CD34 shows weak and focal positivity in BFH where as it shows strong and diffuse positivity in SFT. S-100 protein positivity can be used to differentiate neurofibroma from BFH. The cellularity in BFH might resemble smooth muscle tumors and it needs to be differentiated. Leiomyoma displays uniform fascicular pattern of plump eosinophilic spindle cells with the cigar shaped nuclei and shows diffuse SMA positivity. Malignant fibrous histiocytoma (MFH) is a high grade sarcoma and is less frequent in the deep soft-tissues of the head and neck region. Presence of infiltrative pattern, necrosis, cellular atypia, nuclear pleomorphism and abnormal The tumor may vary after the reports of biopsy but it is always a series of protocols that leads to a successful management. The decision of excision still is based on the staging of tumors for which Radiological amenities still remain an important aspect. The serious outcomes for tumors especially the above mentioned tumor should always be taken into consideration when a neoplasm is witnessed in rare areas. The pace and the aggressive mindset may not be an ideal option for surgeons but timely management can lead to successful outcome getting rid of the primary tumor



### CONCLUSION

Fibrohistiocytic tumor is a rare neoplasm in the oral cavity, only with the clinical and histopathological features is not possible to establish the diagnosis. It is necessary performing proper radiological, surgicam and histopathology with immuno histochemical reactions for determining the origin of the cells, since many others neoplasm both benign and malignant, can present similar morphological characteristics.

### REFERENCES

- [1] Montgomery E, Aaron AD. Clinical Pathology of Soft-Tissue Tumors, ed. Newyork: Marcel Dekker; 2001.
- [2] Heo MS, Cho HJ, Kwon KJ, Lee SS, Choi SC. Benign fibrous histiocytoma in the mandible. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2004;97(1):276-80.
- [3] S. Bielamowicz, M. S. Dauer, B. Chang, and M. Zimmerman. Noncutaneous benign fibrous histiocytoma of the head and neck. Otolaryngology: Head and Neck Surgery.1995;113(1):140-1