

## Haemangioma of Tongue

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**Abstract :** Hemangiomas are benign tumors of the vascular tissue. They can occur in any part of the body including head and neck region. In the tongue, hemangiomas are rare. They usually occur in childhood and are quite uncommon in the adult population. A rare case of tongue hemangiomas in an adult female, is being reported.

### INTRODUCTION

Hemangiomas of the head and neck region are relatively common, representing at least a third of all hemangiomas in humans. They are common in paediatric population but very rare in adults (0.8%)<sup>1,2</sup>.

### CASE REPORT

A 40 year old woman presented with complaints of tongue swelling and discolouration since 4 months. On examination there was a diffuse swelling over the tip and anterior part of the dorsum of tongue (Fig.). The overlying skin was showing bluish discoloration. On palpation the swelling was soft. The clinician suspected it to be either a hemangioma or a lymphangioma. The patient was referred for radiograph and ultrasound examination. A plain radiograph of the soft tissue of the face showed swelling of the tongue and phleboliths. USG revealed enlargement of the tongue with heterogenous echopattern and multiple hyperechoic foci with posterior acoustic shadowing consistent with calcification (phleboliths). There was a large anechoic channel within the lesion which on color doppler revealed the vascular nature of the lesion. Other anechoic areas were also filled up with colour. This was reported as a hemangioma. Contrast Enhanced CT was done which confirmed the gray scale and doppler findings, along with feeding enlarged lingual artery. The tumor was excised and biopsy of specimen showed a single line of endothelial cells with multiple blood vessels present in between the glandular tissue. There was no evidence of mitotic activity in the cells. This ruled out a malignant nature of the lesion and the diagnosis of hemangioma was confirmed.

### DISCUSSION

The oral or pharyngeal hemangioma occur in older age at diagnosis than lesions from other sites, in adults. The mucosal hemangioma most often arises from the frequently traumatized mucosal sites, commonly lip mucosa (63%), the buccal mucosa (14%) and the lateral borders of the tongue (14%), but it may occur at any oral or pharyngeal location. In population studies there is a strong (2:1) male predilection, although there is minimal

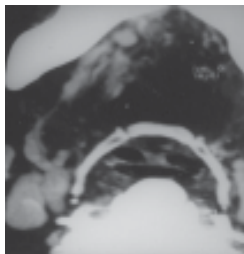


Fig.1: Open mouth view of tongue showing swelling on the top and interior part of dorsal surface.

gender predilection in hospital - based studies. The mucosal hemangioma is typically a soft, moderately well circumscribed painless mass which is red or blue in colouration.

Characterized by an excess of blood vessels, usually veins and capillaries, in a focal area of submucosal connective tissue; it is almost never encapsulated. Capillary hemangioma is the most common type and is comprised of numerous intertwining capillary - sized vessels lined by endothelium<sup>3</sup>. When lesional vascular channels are considerably enlarged, the term cavernous hemangioma has traditionally been applied. This differs from capillary hemangioma in that it is less well circumscribed, is larger and is usually deeper in submucosal tissues; sluggish blood flow may result in organized or dystrophically calcified thrombi within dilated vessels.

The tongue can be very well imaged with a high frequency probe the tip of the organ is better evaluated via a direct approach from its dorsal surface while the submental approach is used to examine the body and base of tongue<sup>4</sup>. The tongue appears as an elongated reflective structure bounded cranially by the air in the oral cavity. On USG, the echogenicity of a hemangioma is variable and depends on the size of the cystic component the tongue is usually enlarged and appears hypoechoic or more or less isochoic. They are highly compressible; color doppler study helps to detect the perfusion in the hemangioma and confirms the vascular nature of the lesion and helps to differentiate it from a lymphangioma<sup>5-7</sup>.

On CT, these tumors enhance; they are often lobular and may have phleboliths. The mass effect of the tumor on the surrounding tissues is relatively rare reflecting their soft nature.

MRI is an important non-invasive technique in the diagnosis of oral and maxillofacial venous malformations and evaluation of adjacent soft tissues. Direct sagittal and coronal images venous malformations show an isointensity or slight hyperintensity on T<sub>1</sub> weighed images and high hyperintensity due to the presence of enlarged venous lakes (slow-flowing blood) on T<sub>2</sub> weighed images on contrast-enhanced T<sub>1</sub> weighed images. A slow and homogeneous increase of signal intensity occurs. Signal homogeneity on both T<sub>1</sub> and T<sub>2</sub> sequences is sometimes interrupted by small hypointense foci and linear strands that correspond to phleboliths, flow void or septal partitions<sup>8</sup>.

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