

**CAVERNOUS HEMANGIOMA OF THE TONSIL****\*DR.NISHA ALICE JOSEPH AND DR. G.C.VIJAYA SAI***PG Resident Department of ENT & HNS, SreeBalaji Medical College & Hospital,  
Bharath University, Chennai,Tamilnadu,INDIA***ABSTRACT**

Hemangiomas are hamartomas rather than true neoplasms as they are generally composed of vascular spaces arising from endothelial cells and not by incorporation of nearby vascular channels. In most cases, the diagnosis of hemangioma is based on clinical evaluation. The occurrence of hemangioma intonsillar tissue is rare. We report a case of a 10 year-old boy who presented with a mass in the throat noticed 6 months back with occasional bleeding from oral cavity while chewing. The clinical evaluation showed that a pedunculated mass arising from the right tonsillar area. CT Neck confirmed a polypoidal lesion with well enhanced and unenhanced areas. Excision and biopsy of the mass were done under GA and the histopathologic examination reported it as a cavernous hemangioma.

**KEYWORDS:** pedunculated, benign, mass, biopsy, vascular

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## CASE REPORT

We present a case of a 10 year old male child who presented to our outpatient department with complaints of a mass in the oral cavity noticed 6 months back with history of occasional bleeding from oral cavity due to trauma while chewing. There was no history of throat pain or dysphagia. On examination a single pedunculated mass arising from the right tonsillar fossa of size approximately 2 x 1 cm size was noticed. The mass appeared mostly smooth on its lateral surface, with ulcerated areas medially, pinkish, not congested and not bleeding on touch. Left tonsillar fossa appeared normal with no palpable neck nodes. Ear and nose examination appeared normal. CT scan neck was done for further evaluation and a 1.5 x 1.2x0.8 cm size polypoidal soft tissue was noted in the right pharyngeal mucosal space involving the medial aspect of the right superior pharyngeal constrictor muscle extending medially into the oropharyngeal air column close to uvula. No evidence of calcification noted within the lesion. On arterial phase of IV contrast, some parts of the lesion showed intense enhancement, and other parts showed no significant enhancement. The radiological features were suggestive of a hemangioma. The patient was taken up for excision and biopsy under G/A. Patient was put in rose position; Using Boyle-Davis mouth gag with suitable retractor, the mouth was kept opened and the mass was snared from its base using Eve's tonsillar snare and base was cauterized. The histopathological report confirmed the diagnosis of a cavernous hemangioma. Regular follow up of the patient for next 6 months was uneventful.

## DISCUSSION

A number of terms have been used to describe vascular lesions, which are classified either as hemangiomas or vascular malformations<sup>(1-3)</sup>. Hemangioma is a term that encompasses a heterogeneous group of clinical benign vascular lesions that have similar histologic features<sup>(2)</sup>. It is benign lesion, which is a proliferating mass of blood vessels and do not undergo malignant transformation. There is a higher incidence in

females than males. Although a few cases are congenital, most develop in childhood. Occasionally, older individuals are affected. The congenital hemangioma is often present at birth and may become more apparent throughout life. Although hemangioma is considered as one of the most common soft tissue tumors of the head and neck, It is relatively rare in the oral cavity and uncommonly encountered by the clinicians. They may be cutaneous, involving skin, lips and deeper structures; mucosal, involving the lining of the oral cavity; intramuscular, involving masticator and perioral muscles; or intra-osseous, involving mandible and/or maxilla<sup>(4,5)</sup>. Hemangiomas are also classified on the basis of their histological appearance. Capillary and cavernous hemangiomas are defined according to the size of vascular spaces<sup>(2,6)</sup>. A number of terms have been used to describe vascular lesions, which are classified either as hemangiomas or vascular malformations<sup>(1-3)</sup>. Hemangioma is a term that encompasses a heterogeneous group of clinical benign vascular lesions that have similar histologic features<sup>(2)</sup>. It is benign lesion, which is a proliferating mass of blood vessels and do not undergo malignant transformation. There is a higher incidence in females than males. Although a few cases are congenital, most develop in childhood. Occasionally, older individuals are affected. The congenital hemangioma is often present at birth and may become more apparent throughout life. Although hemangioma is considered as one of the most common soft tissue tumors of the head and neck. It is relatively rare in the oral cavity and uncommonly encountered by the clinicians. They may be cutaneous, involving skin, lips and deeper structures; mucosal, involving the lining of the oral cavity; intramuscular, involving masticator and perioral muscles; or intra-osseous, involving mandible and/or maxilla<sup>(4,5)</sup>. Hemangiomas are also classified on the basis of their histological appearance. Capillary and cavernous hemangiomas are defined according to the size of vascular spaces<sup>(2,6)</sup>. Capillary hemangioma are composed of small thin-walled vessels of capillary size that are lined by a single layer of

flattened or plump endothelial cells and Top of Form Capillary hemangioma are composed of small thin-walled vessels of capillary size that are lined by a single layer of flattened or plump endothelial cells and surrounded by a discontinuous layer of pericytes and reticular fibres<sup>(6)</sup>. To our knowledge, it was first described in the literature by Sznajder et al<sup>(7)</sup> in 1973 under the term "Hemorrhagic hemangioma". Cavernous hemangiomas consist of deep, irregular, dermal blood-filled channels<sup>(2)</sup>. They are composed of tangles of thin-walled cavernous vessels or sinusoids that are separated by a scanty connective tissue stroma. Mixed hemangiomas contain both components and may be more common than the pure cavernous lesion. Clinically hemangiomas are characterized as a soft mass, smooth or lobulated, sessile or pedunculated and may be seen in any size from a few millimeters to several centimeters. The color of the lesion ranges from pink to red purple and tumor blanches on the application of pressure, and hemorrhage may occur either spontaneously or after minor trauma. They are generally painless. Oral hemangiomas are usually seen on the gingiva and less frequently at other sites where it occurs as a capillary or cavernous type, more commonly the former<sup>(6)</sup>. In our case, the patient presented with a mass that he noticed at the age of 10yrs and was causing him trouble while chewing for which excision was necessary. The mass was typically pedunculated, pinkish in colour and painless arising from the tonsillar fossa which gave the diagnosis of a hemangioma in an unusual site of presentation. Management of hemangiomas and the treatment of choice depend on several factors including the age of the patient and the size and extent of the lesions, as well as their clinical characteristics. Some congenital lesions may undergo spontaneous regression at an early age<sup>(8)</sup>. The 2 primary medical treatments are steroids and beta-blockers<sup>(9)</sup>.

Steroids have become a mainstay in the treatment of proliferating hemangiomas in infants and children. High doses of systemic or intralesional steroids are the first-line treatment, and a dramatic response is observed in 30% of patients. Surgical or invasive treatment of oral hemangiomas has evolved. Embolotherapy is one of the more commonly used adjunctive procedures in the treatment of vascular tumors. Absolute ethanol is used as a sclerosing agent<sup>(10)</sup>. Other agents used for sclerosis of oral vascular tumors include sodium morrhuate, sodium tetradecylsulfate (STS), and hydroxypolyethoxydodecan (an agent that is a double hydrophilic and hydrophobic chain). Use of laser therapy for the treatment of hemangiomas has gained popularity. Seventy percent of cavernous hemangiomas resolve on their own by the time of adolescence and 50% has an association with the skin hemangioma. In our case, tonsillar hemangioma was not associated with the skin lesions. Tonsillar hemangiomas are rare according to literature<sup>(11,12)</sup>. The significance of tonsillar diseases is the danger of local and general complications which may be not only acute but may also arise from an exacerbation of chronic inflammation. A non-pulsatile hemangioma may histologically consist of numerous irregular, blood-filled spaces lined by endothelial cells and surrounded by connective tissue. When many proliferating endothelial cells line small capillaries, the lesion is referred as a capillary hemangioma. In the case of large dilated blood sinuses, the term cavernous hemangioma is applied. A third histologic variant is the cellular (juvenile) hemangioma<sup>(13)</sup>. In our case histologic examination showed reactive lymphoid tissue with large vascular spaces lined by a single layer of endothelial cells. The histopathological diagnosis was cavernous hemangioma.



**Figure/Table1**  
*examination of the oropharynx showing a small pedunculated pinkish mass in the right tonsillar fossa*



**Figure/Table 2**  
*CT NECK showing a 1.5 x 1.2x0.8 cm size polypoidal soft tissue was noted in the right pharyngeal mucosal space involving the medial aspect of the right superior pharyngeal constrictor muscle extending medially into the oropharyngeal air column close to uvula.*



**Figure /Table 3**  
*picture showing the pedunculated mass arising from the right tonsillar fossa .*



**Figure /Table 4**  
**Picture showing the excised hemangioma from the right tonsillar fossa.**

## CONCLUSION

We presented this case due to its rarity as per literature due to its unusual site of presentation of a hemangioma and also in the age of presentation as hemangiomas are known to regress by itself by 5 years of age and mostly remain asymptomatic unlike in our case who noticed the mass interfering with his chewing at the age of 10years. Localized

tumors of tonsil, and/or chronic tonsillitis with recurrent exacerbations are tonsillectomy indications. Considering this to be a benign mass excision and biopsy was performed. Patient recovered well after surgery and follow up of this patient for the next 6 months was uneventful.

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