

Unusual Localization of Cavernous Hemangioma: Palatine Tonsil

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Abstract: Hemangiomas are benign tumors of dilated blood vessels. More than 50% of these lesions occur in the head and neck region. Tongue, lips, buccal mucosa, palate and floor of the mouth are the commonest site of the lesions. Cavernous hemangioma, known as congenital but now it is considered as an autosomal dominant disease. Management of hemangioma depends on a variety of factors but most hemangiomas require no intervention. It is most commonly seen in the head and neck region but an isolated hemangioma in the tonsillar tissue is a rare occurrence.

Keywords: Cavernous hemangioma, Palatine tonsil.

INTRODUCTION

Hemangiomas are benign, vascular neoplasms [1]. They are present at birth and gradually increase in size and spontaneously resolve by five years of age. About 60 % to 70 % of the lesions are located in the head and neck region [2]. In the oral cavity, the lips, tongue, floor of the mouth, buccal mucosa and palate most commonly involved. Here we report a rare case of hemangioma located at the inferior pole of the tonsil.

CASE REPORT

A 30-year old male presented to outpatients clinic with complaints of constant foreign body irritation on left tonsillar region for 1 month. There were no features of pain, fever, difficulty in speech but he had problem in swallowing. On examination, soft, pinkish, sessile, smooth surfaced solitary mass measuring about 1 x 1.5 cm in size was seen originating from the inferior pole of the left tonsil (Fig-1). Because of the localization, intraoral examination was not sufficient for visualization of all margins of the lesion so fiberoptic endoscopy also used for evaluation. On palpation, mass was soft like a polyp. All other local and systemic examinations were normal. Surgical excision was carried out under general anesthesia. Patient was not symptomatic for tonsillectomy so only hemangiomatous tissue was excised. The lesion was hold from its peduncle with clamp (Fig-2). It was dissected from tonsil by bipolar cauterization. Histopathological confirmation was cavernous hemangioma. Patient had no per or post-operative complication.

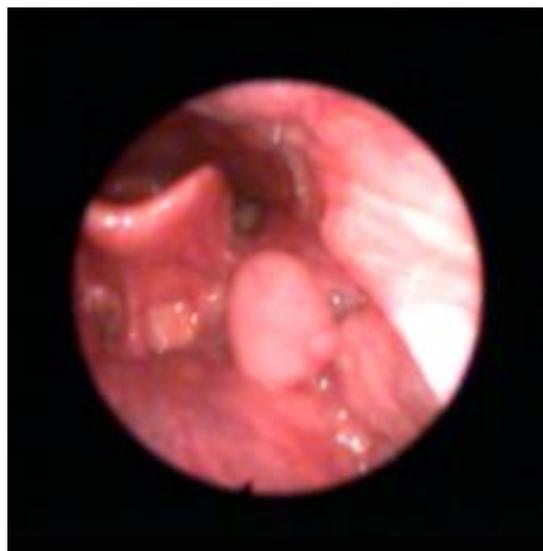


Fig. 1: Endoscopic appearance of the hemangioma originating from inferior tonsil pole



Fig. 2: Excised lesion with clamp

DISCUSSION

Hemangiomas are considered as benign tumors being characterized by 3 stages: Endothelial cell proliferation, rapid growth and at last spontaneous involution [3]. They are classified into two categories: capillary or cavernous. Capillary hemangiomas consist of tightly arranged blood vessels and usually affect the skin, subcutaneous tissue, mucosal surfaces and lips but also can be found in organs such as liver, spleen and kidneys. Cavernous hemangiomas are less common. They are composed of large, vascular spaces which are usually bigger, and deeper than those of capillary hemangiomas [4].

Clinically hemangiomas are characterized as a soft, smooth or lobulated, sessile or pedunculated and may be seen in any size from few milli - meters to several centi - meters [5]. In our case the lesion was pedunculated and protruding to the hypopharynx.

Radiographic imaging is indicated preoperatively in selected cases where large lesions may impinge on vital anatomical structures, such as the facial nerve or orbit. Computed tomography (CT) and magnetic resonance imaging (MRI) can also be used for volumetric analysis of hemangiomas and vascular malformations [6]. Microscopically it has dilated thin walled vascular caverns lined by a single layer of endothelium and a variable layer of fibrous adventitia. Vascular spaces lack elastic fibres so areas of thrombosis and hemorrhage within the vascular spaces may be existed [7]. Hemangiomas of the oral cavity are lesions which can cause distressing problems to patients producing cosmetic deformity, recurrent hemorrhage, and functional problems with speaking, mastication and deglutition [5]. Fortunately our patient's only complaint was foreign body irritation, for one month. Probably it was present at birth, hemorrhage may occur either

spontaneously or after minor trauma and then the patient noticed the lesion.

Management of hemangioma depends on a variety of factors and most true hemangiomas require no intervention. However, 10-20 % requires treatment because of the size, exact location, stages of growth or regeneration. There are many treatment modalities reported in the literature for head and neck hemangiomas, including wait and watch policy for spontaneous involution, intralesional and systemic corticosteroid treatment, embolization, excision, electrolysis and thermocautery, immunomodulatory therapy with interferon alfa - 2a and laser photocoagulation [5,8]. Until recently, systemic corticosteroids were the first-line medical therapy for most complicated hemangiomas in which mechanism of effect is poorly understood. Alternatives to systemic corticosteroid treatment are interferon- α , vincristine and propranolol for aggressive and steroid unresponsive hemangiomas [9]. In more complicated cases, if medical treatment fails, surgical excision is the choice of treatment for cavernous hemangiomas. Options that include sclerosing agents, cryosurgery, irradiation and carbon dioxide laser excision [7]. Surgery is usually indicated when there is no response to systemic treatments, and can be performed as a simple excision especially for localized lesions. We did not do tonsillectomy, made our surgery with bipolar cauter and after excision origin of the lesion was widely cauterized. In the 3 month follow up, there was no remnant of any hemangiomatous tissue..

CONCLUSION

Hemangioma is a vascular benign tumour and its generally seen in head and neck region. We think that surgery is the appropriate treatment modality for most isolated vascular lesions of oral cavity and oropharynx..

REFERENCES

1. McGill TJI, Forsen JWJ, Mulliken JB; Hemangiomas and vascular anomalies of the head and neck. In Cummings CW editor; Otolaryngology Head and Neck Surgery. Mosby, St. Louis: 1998: 66-80.
2. Okoji VN, Alonge TO, Olusanya AA; Intra-tumoral ligation and the injection of sclerosant in the treatment of lingual cavernous hemangioma. Niger J Med., 2011; 20: 172-175.
3. de Avila ED, Molon RS, Conte Neto N, Gabrielli MA, Hochuli Vieira E; Lip Cavernous hemangioma in a young child. Braz Dent J., 2010; 21(4): 370-374.
4. Kumar V, Cotran R, Robbins S. Blood Vessels. In: Basic Pathology. 7th Edition; 2003;355-357(Turkish)

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5. Kamala KA, Ashok L, Sujatha GP; Cavernous hemangioma of the tongue: A rare case report. *Contemporary Clinical Dentistry*, 2014; 5(1): 95-98.
 6. Bonet Coloma C, Minguez Martinez I, Palma Carrio C, Galan Gil S, Penarroche Diago M, Minguez Sanz JM; Clinical characteristics, treatment and outcome of 28 oral hemangiomas in pediatric patients. *Med Oral Patol Oral Cir Bucal.*, 2011; 16: e19 e22.
 7. Joseph S, Prakash M, Mohammed HK; Benign Mass in Tonsil- Cavernous Hemangioma. *Journal of Clinical and Diagnostic Research* 2013;7: 2284-2285
 8. Atkins JH, Mandel JE, Mirza N; Laser ablation of a large tongue hemangioma with remifentanil analgesedation in the ORL endoscopy suite. *ORL J Otorhinolaryngol Relat Spec.*, 2011; 73: 166-169.
 9. Vesnaver A, Dovsak DA; Treatment of vascular lesions in the head and neck using Nd: YAG laser. *J Craniomaxillofac Surg* 2006;34:17-24.