Case report

Reactive Cavernous Haemangioma Of Tongue; An Unusual Presentation

Saurabh Kumar [1], Arun Paul [2], Rabin Chacko[3]

[1]Sr. Lecturer Faculty of Dentistry SEGi university, Malaysia

[2]S. Associate Professor CMC Vellore, India

[3]Professor and Head CMC Vellore, India

Abstract:

Haemangiomas are benign vascular tumor most commonly seen in the head and neck region. Oral cavity haemangiomas are mostly seen on cheeks and upper lip with tongue being a rare finding. We present a case of tongue cavernous haemangioma which appeared as pedunculated proliferative growth on the dorsum of the tongue. Unlike usual presentation of infantile or congenital haemangioma our case presented later in the childhood and had an insidious onset hence reported as a reactive variant.

Keywords: Haemangioma, Vascular malformation, Capillary malformation, Venousmalformation

Corresponding author:

Dr. Saurabh Kumar

Sr. Lecturer Faculty of Dentistry SEGi university, Kota Damansara, Malaysia

Email: saurabhkumar@segi.edu.my

Introduction

Hemangioma is defined as “a benign tumor of dilated blood vessels.” Haemangiomas are one of the common developmental vascular anomalies of infancy and childhoodmost often they are seen in head and neck region.[1] oral mucosal involvement is less frequent with tongue being rarely involved. Hemangioma of head and neck appears a few weeks after birth and they grow rapidly. It has varied terminology as port-wine stain, strawberry hemangioma, and Salmon patch. There is still uncertainty about this condition being neoplastic or a reactive state. This paper describes the management of cavernous haemangioma in a 10 year -old child with a unique proliferative presentation. Colour doppler imaging studies ruled out venous malformation but showed internal vascularity. The lesion was diagnosed as cavernous haemangioma through histopathology. Early detection and biopsy becomes important in this condition in order to determine the clinical behaviour of the tumour and to prevent potential complications.[2]

Case report

10-year-old child presented with history of growth over the dorsum of the tongue since one year. The growth was insidious in onset and was slowly increasing in size. The patient did not complain of any pain or bleeding. The patient had recently developed swallowing difficulty due to the increased size of the lesion. Clinical examination revealed a proliferative pedunculated soft tissue mobile growth over the middle third of the dorsum of the tongue of size 2cmx 3cm. The lesion had reddish appearance with no surface ulceration. The surrounding soft tissue was normal with no induration. (Figure 1) The growth showed blanching on application of mild pressure.

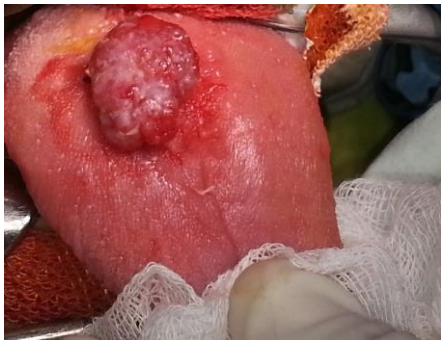

Figure 1: 3cm x 2cm pedunculated, mobile growth on the middle one third dorsum of tongue.

A provisional diagnosis of haemangioma was given and colored doppler imaging was done which ruled out any vascular malformation and internal calcification but showed presence of internal vascularity. (Figure 2) Based on the clinical and doppler findings decision was made to excise the growth under general anaesthesia with adequate haemostatic precaution with the use of electrocautery and suturing.

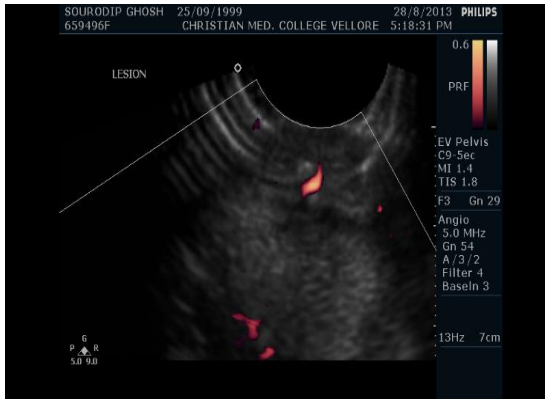

Figure 2: Color doppler showing internal vascularity

First a purse string suture was placed all around the base of the growth using 3-0 vicryl which helped to occlude any collateral blood supply. Following which electrocautery was used to dissect out the growth which helped in producing additional

haemostasis. (Figure 3) The surgery was uneventful with normal post-operative recovery. Surgical biopsy reported as cavernous haemangioma.

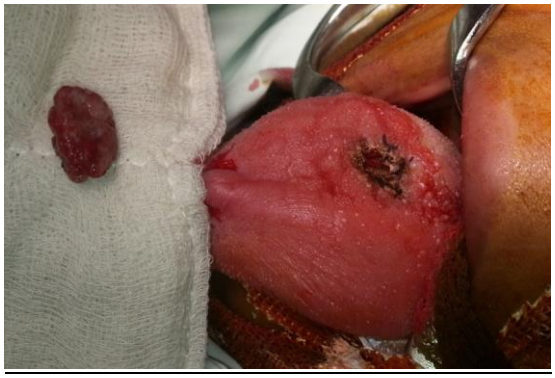

Figure 3: Surgical excision done with complete haemostasis

Discussion

Mulliken and Glowacki in 1982 proposed an effective classification of vascular anomalies [3] two distinct variants proposed included haemangiomas and vascular malformations. Based on the depth of tissue involvement haemangiomas were subdivided into superficial, deep and compound. Vascular malformation on the other hand was classified based on type of vessels involved like capillary, venous, arteriovenous, lymphatic

or combined. Further based on the flow characteristics vascular malformations were divided into low flow, high flow or combined.[4]

Haemangiomas are benign tumors seen in infancy and early childhood with most of them associated with head and neck region. Infantile variant appears during the first weeks of life mostly as bluish pink macules or skin patches. The lesions enters a proliferative phase were the lesion becomes aggressive appearing elevated above the surrounding skin surfaces. Generally, this phase lasts up to fifth month hereafter involution occurs with 90% completion by age 4 years. Complete resolution is possible, but in many cases the cutaneous lesion still remains mostly as telangiectasia.(5)Congenital hemangiomas howeverare fully formed at birth but are clinically similar to infantile variant, these are mostly rapidly involuting type but may be non-involuting as well.The present case of cavernous haemangioma in a 10-year-old is exceptionally unusual. Haemangiomas are well known to be associated with infancy,however in our case the lesion was not present at birth but wasan acquired reactive form.

The etiology of acquired reactive formhaemangiomais unknown, but hormone, inflammation and trauma are thought tobe the likely causes.[1]

Haemangiomas are characterized by hyperplasia of blood vessels, usually veins and capillaries, in a focal area of submucosal connective tissue. It is almost never encapsulated.Clinically they may have varied manifestation as seen in congenital form as strawberry patches to other infantile variants as compressible soft submucosal swelling. In our patient, the lesion involving the tongue had a proliferative growth not involving the deeper tongue musculature. Color doppler also ruled out vascular flow, henceforth it was possibleto treat the patient through surgical excision. Other modalities in treatment include corticosteroids, sclerosing agents, diathermy, electrocauterization, cryosurgery, laser, embolization, radiofrequency, radiation therapy, and interferon therapy. [6-8] The frontline choice of treatment is however decided based on age of presentation, stage of involution, size and extent of the lesion. These lesions often mimic as pyogenic granuloma and

histopathology of the lesion often is helpful in confirming the diagnosis as was in our case which presented to be cavernous haemangioma, characterized by the presence of large dilated blood-filled sinusoidal spaces with thin walls showing an endothelial lining.

Conclusion

cavernous hemangioma of tongue is a rare occurrence. Clinical findings must always need to be supplemented with radiographic imaging and ultrasound color doppler to rule out the possibility of other forms of vascular anomalies. Suitable treatment modality needs to be planned based on the prognosis and characteristics of particular anomaly.

References:

1. M. S. Greenberg, M. Glick, and J. A. Ship. Burkett's Oral Medicine.11th ed. Hamilton: B. C. Deker Inc; 2008. pp. 139.

2. Yoon RK, Chussid S, Sinnarajah N. Characteristics of a pediatric patient with a capillary hemangioma of the palatal mucosa: a case report. Pediatr Dent. 2007;29(3):239–42.

3. Mulliken JB, Glowacki J. Hemangiomas and vascular malformations in infants and children: a classification based on endothelial characteristics. Plast Reconstr Surg. 1982;69(3):412–22.

4. Liu D, Ma X, Li B, Zhang J. Clinical study of preoperative angiography and embolization of hypervascular neoplasms in the oral and maxillofacial region. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2006;101(1):102–9.

5. Chang LC, Haggstrom AN, Drolet BA, Baselga E, Chamlin SL, Garzon MC, et al. Growth characteristics of infantile hemangiomas: implications for management. Pediatrics. 2008;122(2):360–7.

6. Chandel V, Jangra B, Khurana N, Garg A, Devashish. Venous malformations management by Er,Cr:YSGG laser: An Alternative approach. Laser Ther. 2017;26(4):305–10.

7. Kutluhan A, Bozdemir K, Ugras S. The treatment of tongue haemangioma by plasma knife surgery. Singapore Med J. 2008;49(11):e312-4.

8. Zheng JW, Zhou Q, Yang XJ, Wang YA, Fan XD, Zhou GY, et al. Treatment guideline for hemangiomas and vascular malformations of the head and neck. Head Neck. 2010;32(8):1088–98.