Lateral Tongue Cavernous Hemangioma Due To Trauma. A Case Report

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Abstract
Hemangiomas have been a challenge to the fraternity of oral and maxillofacial surgery. There has been presentation of this vascular malformation as a congenital presentation which involutes by adulthood. The presentation of these beyond birth in a later age especially in tongue due to a history of trauma is rare. This case report highlights a 58 year old female with cavernous haemangioma of the right lateral border of tongue which was surgically excised. Trauma caused on the lateral part of the tongue was the trigger for the initiation of cavernous haemangioma in this patient and hence reported. This certainly indicates the elderly age presentation of the patient would give an array of research regarding the etiology of cavernous haemangioma.

1. Introduction
Hemangiomas in the oral cavity are always of clinical importance and require appropriate treatment. The majority of hemangiomas involve the head and neck. However, they are rare in the oral cavity but may occur on tongue, lips, buccal mucosa, gingiva, palatal mucosa, salivary glands, alveolar ridge, and jaw bones. (Eivazil et al., 2009) They are defined as “a benign tumor of dilated blood vessels.” Hemangioma of head and neck appear a few weeks after birth and they grow rapidly. It is also known as port-wine stain, strawberry hemangioma, and Salmon patch. The hemangiomas can also be classified depending on the vessel type involved or flow types such as the arterial and arteriovenous (high flow) type, capillary or venous (low flow) type. (Greenberg et al., 2008)

They are characterized by hyperplasia of blood vessels, usually veins and capillaries, in a focal area of submucosal connective tissue.

Trauma, infections and hormonal changes causing haemangioma is less reported. In our case we highlight the presentation of the swelling on the lateral surface of tongue. Clinically they may manifest as firm, pulsatile, warm masses and the venous malformations appear first in early childhood and clinically manifest as soft and easily compressible mass. According to the classification given by Mulliken and Glavacki in 1982, they divided the vascular deformities, into 2 groups: hemangiomas and the vascular malformations. This is a case presentation of lateral tongue involved with cavernous haemangioma.

2. Case presentation
A 58 year-old female patient reported to our department in the year 2014 with the chief complaint of swelling on the lateral surface of the tongue. The patient gave a history of trauma at region of tongue 15 years back. There was no
history of associated pain or bleeding from the site. On intraoral examination, there was a sessile growth measuring about 2cm × 2cm, which was blue in colour at the left lateral surface of the tongue with no underlying attachment (Figure 1). There was no ulceration present. The lesion appeared to blanch on application of pressure. The ultrasonography showed low flow lesion. During the surgical procedure, ligation under the mass was done with the suture thread. The mass was then excised out, and interrupted sutures were placed (Figures 2). The specimen was then sent for a histopathological examination and it reported CH (Figure 3). The post-operative healing was uneventful. The patient after one year follow up had no recurrence. Case presentation

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3. Discussion

Haemangiomas are the most common benign tumours of the head and neck in children, but their occurrence on the tongue is extremely rare. In our case the presentation of CH was in an elderly age. The history of trauma that the patient gave was positive for the CH patient. The early diagnosis of the case would have been possible if patient had reported when change in colour and growth on tongue was noticed. The haemangioma appears as soft mass, smooth or lobulated, and sessile or pedunculated and may vary in size from a few millimetres to several centimeters. (Neville et al., 2002) They are usually deep red and may blanch on the application of pressure and if large in size, it might interfere with mastication. (Qureshi et al., 2004) This resembled our case presentation. The superficial haemangiomas are often lobulated, and blanch under finger pressure and the deeper lesions tend to be dome-shaped with normal or blue surface coloration, and they seldom blanch. The tongue requires consideration since it is the centre of activity such as swallowing, breathing speech. The vascularity of the tongue may also cause excessive bleeding if excision has to be considered. Arteriovenous haemangioma are characteristic of bruit with flow of blood from the venous to arterial system, bypassing the capillary beds. The syndromes that are associated with haemangiomas are Osler-Weber-Rendu syndrome, Sturge-Weber syndrome, and blue rubber bleb nevus syndrome. Clinical diagnosis was based on histopathological evaluation, which was confirmed to be a cavernous haemangioma. In the initial stages lesions may be very cellular with solid nests of plump endothelial cells and little vascular lumen. The lesions comprise of well-developed, flattened, and endothelium-lined capillary channels of varying sizes in a lobular configuration. (Enzinger et al., 1995) In cavernous haemangioma, there is presence of large dilated blood sinuses with thin walls each showing an endothelial lining. The sinusoidal spaces are usually filled with blood although there might be presence of lymphatic vessels. (Shafer et al., 1983) The appearance of cavernous haemangioma is a rare occurrence on the tongue. The treatment modality should be planned according to the diagnosis and prognosis of the particular vascular malformation. 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. (Atkins et al., 2011) However, 10-20% requires treatment because of the size, exact location, stages of growth or regeneration. (Kamala et al., 2014) In this case the surgical removal after ligation has given excellent result without recurrence. The treatment plan established for haemangiomas must consider aspects such as size, location, lesion hemodynamics, patient’s age and viability of the technique to be used as described by Pranitha et al., 2015. The literature search about lateral tongue presentation of CH due to trauma are not there and hence this reporting will be a guide for future research.

Conclusion

The postoperative recovery without recurrence of the CH was the indicator of proper treatment rendered.

Research Highlights

1. The case is unique where patient gives a history of trauma 15 years back and the reaction to it causing CH.
2. The conservative approach of ligation of the vessel and resecting the CH gave good results for the patient.
3. The global researchers get a platform to study more in the field of CH caused due to trauma which are not reported after literature search in MEDLINE, Pubmed and other databases.

Limitations

The case was the only one reported so far in our department and hence reported for international awareness regarding the same.

References


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