



Case Report

Cavernous hemangioma of tongue - A rare case report

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ARTICLE INFO

Article history:

Received 02-04-2021

Accepted 15-04-2021

Available online 08-06-2021

Keywords:

Cavernous hemangioma

Tongue

Histopathology

Excision

ABSTRACT

Hemangiomas are the developmental vascular abnormalities, out of which more than 50% occur in the head and neck region, especially on buccal mucosa, lips, tongue, and palate. Cavernous hemangiomas are characterised by irregular, deep, dermal blood-filled channels having tangles of thin walled cavernous vessels or sinusoids, separated by a scanty connective tissue stroma. The present case report is a case of cavernous hemangioma present on the tongue in a female patient.

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1. Introduction

Hemangioma is derived from a greek term, Haima-blood; angeion-vessel, oma-tumor which means tumor of dilated blood vessels, commonly observed in infancy and childhood.¹ It has been observed that it is commonly seen in 1st month of life and about 60-70% of the lesions are seen in head and neck region.² It is the most common benign tumours, characterized by a rapid proliferative phase, slow involution, followed by spontaneous resolution. It is also known as strawberry hemangioma, port-wine stain, and Salmon patch.³

Based on vessel involved and type of blood flow, hemangioma is classified into two types: capillary and cavernous.² Capillary hemangioma comprised of a number of small capillaries lined by a single layer of endothelial cells which is supported in a connective tissue stroma of varying density. Cavernous hemangioma consists of a large, thin walled vessels, or sinusoids lined by epithelial cells separated by thin layer of connective tissue septa.⁴

Various studies observed that hemangiomas are highly prevalent among females.⁵ In head and neck region,

hemangioma is more commonly observed in oral mucosa, face, lips, trunk, and tongue.⁵ The present case report is a case of 22 yrs old female reported with a lesion on tongue being diagnosed as cavernous hemangioma.

2. Case Report

A 22 years old female patient reported to a dental clinic with the chief complaint of bluish swelling over the ventral surface tongue since 1 year. History of present illness revealed that initially there was a swelling which was small in size but gradually increased to attain its present size. No associated features like pain or difficulty in speech was observed. No history of trauma was reported. Past medical, dental and family histories were found to be non-contributory. Physical examination revealed that patient was of normal built and all the vital signs were under normal limit.

Intra oral examination revealed a solitary dome shaped sessile swelling over the right ventral surface of tongue, measuring about 2x3 cm in its greatest dimension. The swelling was bluish purple in color with normal surrounding mucosa (Figure 1). The surface of swelling was smooth with no ulceration having well-defined borders. On palpation,

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swelling was felt soft in consistency, non tender, non mobile and blanched on applying pressure.

Based on clinical findings, the provisional diagnosis of hemangioma of tongue was made with the differential diagnosis of angiomylipoma, granular cell myoblastoma.

The routine blood investigations were done before surgical excision and were observed to be normal. Lesion was surgically excised under the local anesthesia (Figure 2), followed by suturing of tongue (Figures 3 and 4). The excised specimen was then sent for histopathological examination that confirms the definitive diagnosis of cavernous hemangioma with void capillary vessel. After a period of one week, the healing was found to be uneventful and complete healing was achieved after one month.



Fig. 1: A dome shaped sessile swelling on right ventral surface of tongue

3. Discussion

Lingual hemangiomas are common in occurrence, posing difficulty as the tongue is a mobile intrusive organ which is more prone to trauma and consequent complications.⁶ Our article presents a case report of cavernous hemangioma on tongue. Based on the incidence, location and number of lesion, a similarity was reported with cases reported in the literature.^{6–8}

The lesion on tongue needs a special attention as it is prone to minor trauma leading to ulceration and bleeding, difficulty in eating and swallowing, breathing and aesthetic issues.⁹ The hemangioma presents as a soft, smooth or lobulated, and sessile or pedunculated mass. It may vary in size ranging from a few millimeters to several centimeters.¹⁰ These lesions are usually deep red in color and on applying pressure it may blanch.¹¹ The hemangiomas can be superficial or deep in nature. Superficial hemangiomas are normally lobulated, and blanch on applying finger pressure, whereas the deeper lesions are dome-shaped having normal or blue surface



Fig. 2: Surgical excision was done



Fig. 3: Excised specimen

coloration, with rare blanching.⁹

Cavernous hemangiomas are also known as angioma cavernosum, or cavernoma. They are commonly seen on scalp, face, and neck, but can also be found in the liver and other organs. Superficial cavernous hemangiomas are usually friable and easily infected if the skin is broken.¹² Different syndromes have been found to be associated with this vascular malformation like Sturge-Weber syndrome, Osler-Weber-Rendu syndrome, and blue rubber bleb nevus syndrome.⁵ In present case report, besides lesions, no other findings were observed, thus ruling out the presence of any syndrome. Differential diagnosis includes



Fig. 4: Suturing done after surgical excision

granuloma fasciale, insect bite, angiosarcoma, and pyogenic granuloma.⁵ We ruled out the differential diagnosis based on clinical nature, features and histopathological findings of the disease.

The diagnosis of lesion is based on clinical findings, appearance, signs and symptoms, investigations like CT, MRI, Color doppler and histopathological findings.¹² In present case final diagnosis was based on clinical findings and histopathological appearance of lesion.

Generally haemangiomas are asymptomatic thus can be treated conservatively. But if symptoms like dysphagia, dyspnea, mass effect, or haemorrhage are observed, then symptomatic lesions should be excised.⁵ Various treatment interventions are available like sclerosing agents, systemic and intralesional corticosteroids, thermacautry, laser photocoagulation, electrolysis, embolization and surgical excision. In present case we surgical excision of lesion was done. Now a days, sclerosing therapy is being commonly used due to its efficacy and ability of not to damage the surrounding tissues.⁵

4. Conclusion

The present case report was a rare case of cavernous hemangioma on ventral surface of tongue in a young female patient. Our case report highlights the importance of histopathological investigation in diagnosing the lesion. It is crucial to diagnose the disease in early stages based on clinical findings and biopsy, so as to avoid the potential complications associated with it. The treatment intervention should be carried out based on the diagnosis of lesion and

prognosis of the specific vascular malformation.

5. Source of Funding

None.


6. Conflict of Interest

The authors declare that there is no conflict of interest.

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Cite this article: Mohan K, Sowmya GV, Saxena S. Cavernous hemangioma of tongue - A rare case report. *J Oral Med, Oral Surg, Oral Pathol, Oral Radiol* 2021;7(2):139-141.