DOI: 10.21522/TIJMD.2013.08.02.Art004

A Case Report on Capillary Hemangioma Over the Dorsum of Tongue in an Adult

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Abstract

Capillary hemangiomas of the tongue are rare vascular tumors that may cause pain, bleeding, chewing difficulties, difficulties in speaking and occasionally breathing difficulties. While hemangiomas can be seen within weeks to months since birth, most cases are seen in early childhood, and uncommonly in adulthood. We here report a case or capillary hemangioma in the dorsum of tongue in an adult. Initial clinical diagnosis considered were hemangioma, granular cell myoblastoma, pyogenic granuloma, and kaposi sarcoma. After the tumor was excised and biopsied, it was confirmed to be Lobular Capillary Hemangioma.

Keywords: Adult Tongue Tumor, Capillary Hemangioma, Capillary Hemangioma Tongue, Hemangioma, Lobular Capillary Hemangioma, Tongue Tumor.

Introduction

Hemangiomas are common benign tumors arising which have vascular origin, that can be commonly seen in the head and neck region [1, 2]. Though the incidence in the Indian population is unclear [3], four-of-five patients have solitary lesions, and are seen three times more common in females than in males [2]. Hemangiomas are most commonly seen in early childhood but can be seen within weeks to months after birth which commonly regress on their own, or much more rare in adults. When considering adult hemangiomas they are commonly seen arising from the eyelid, cheek, upper lip and sometimes from the tongue. When arising from tongues, these tumors can be painful, with bleeding from the tumor, along with difficulty in chewing, speaking and sometimes breathing. Many histological and clinical entities are described under hemangiomas. Some of the common variants capillary hemangioma, cavernous hemangioma, juvenile hemangioma and pyogenic granulomas [4]. Capillary

hemangiomas are collections of small vessels, whereas cavernous hemangiomas are collections of large dilated vessels [1]. Our case report is of a female patient who had a tumor growing in the midline over the dorsum of tongue which was diagnosed to be capillary hemangioma, that was surgically excised.

Case Presentation

A 70-year-old female presented with complaints of swelling over the tongue for the past 1 month. She noticed that the swelling was gradually progressing in size, non-painful, with serous discharge from the swelling also associated with a single incident of bleeding. She had some discomfort while chewing and swallowing with foul breath but no disturbances in tasting or breathing. No history of drooling of saliva, loss of appetite or weight. She had no known comorbidities.

On examination, she was moderately built and nourished. She had bad dental hygiene with multiple tooth caries. On the dorsum of her tongue, along the midline, there was a single

 solitary pedunculated swelling of size about 3cmx3cm [Figure 1]. It was firm with well defined margins, multiple ulcerations and irregularities over its surface and didn't bleed on touch. The rest of the tongue and oral mucosa appeared normal. There were no cervical lymph nodes palpable. With the initial history and examination, differential diagnosis

of papilloma, hemangioma and granuloma were considered.

Based on clinical examination and the patient's age and history diagnosis of papilloma with differential diagnosis of carcinoma, hemangioma, granular cell myoblastoma, pyogenic granuloma, and kaposi sarcoma.



Figure 1. Hemangioma Over the Dorsum of the Tongue

She was worked up for surgery and routine investigations were within normal limits. After anesthetist assessment, she was planned and proceeded for excision of the tumor. After excision the raw area was closed with absorbable suture - Chromic Catgut.

Postoperative period was uneventful and she was discharged the next day. The follow up histopathological examination revealed lobular capillary hemangioma in the below histological slide [Figure 2].

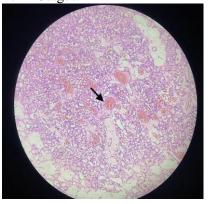


Figure 2. Lobular Capillary Hemangioma with Lobules of Thin-walled Capillaries (Black Arrow)

Postoperatively the patient recovered from anesthesia without any complication. Oral liquid diet was started four hours after surgery and solid diet six hours after surgery. Patient was discharged the next day.

Discussion

The difficulty in diagnosing oral capillary hemangiomas may potentially arise due to confusion with other differential diagnoses such as pyogenic granulomas, cavernous hemangiomas, other premalignant and malignant tumors in the oral cavity [4]. This along with the inconsistent naming methods of vascular anomalies prove another major hurdle in proper diagnoses of tumors in the oral cavity. Thus, histopathological examination still proves the correct diagnosis in such cases rather than clinical diagnoses. The last classification

of vascular entities was from the International Society for the Study of Vascular Anomalies which had a final revision in 2018. This has been useful in classifying lesions to the latest updates.

The capillary hemangioma encountered by the patient appeared to be benign clinically. But the patient complained of discomfort and occasional bleeding from the swelling. Hence, excision biopsy was planned. Apart from excision, laser and cryotherapy methods are also available [5,6] or by using sclerosing agents such as [7].

Many of the hemangiomas when presenting are usually very small. They regress on their own, and if not are mostly curetted. Complications include bleeding and ulceration, which in turn make chewing and speaking difficult. The need for surgical excision, or the use of laser or cryotherapy become useful on non-regressing, larger tumors. Like our reported case, surgical excision and biopsy was conveniently done. Post excision, hemorrhage and ulceration may develop at a much lower rate since the wound is simply sutured. This hemorrhage occurs when the hemangioma has reached and goes through the epithelial basement membrane. Local compression or a mattress suture can resolve this complication

The tumor in our case was simply excised because it was small enough to be excised completely, non life threatening, without involvement of any other underlying or surrounding structures, and cost effective. So with minimal necessary precautions the tumor was completely excised. The patient was followed up to a year after excision and we

References

[1]. Kolarkodi, S. H., et al., 2022, Non-Surgical Management of Lingual Hemangioma by Combined Sclerotherapy and Cryotherapy. *Journal of College of Physicians and Surgeons Pakistan*, 32:1080-1082, 10.29271/jcpsp.2022.08.1080, https://pubmed.ncbi.nlm.nih.gov/35932140/

could see the wound completely healed with no notable recurrence.

Conclusions

Because of very less pathologically proven clinical diagnosis of hemangiomas, it is safe to assume that the term hemangioma is used imprecisely. Additionally, not all hemangiomas have the same clinical picture or pathological This has led many findings. practitioners to easily be confused with different entities, such as other vascular malformations, pyogenic granuloma, cutaneous neuroblastoma or lymphoma. Furthermore, capillary hemangiomas are less commonly seen in the tongue. So, it is important to any surgeon therefore be aware of other possible diagnoses during examination and management, and should be ready to take needed precautions while planning for excision, since histopathological diagnosis is currently the best and accurate method of confirmation of diagnosis of hemangiomas.

Acknowledgment

This research paper would not have been possible to be completed without the support and guidance of Prof. R. G. Santhaseelan, Dept of General Surgery and Prof. Mary Lilly, Dept of Pathology. Their continuous support, dedication and overwhelming attitude towards helping us in this case report is why this paper was completed. I also thank all the staff of our institution Sree Balaji Medical College and Hospital and the institution itself, for their aid and support during the care of the patient pre and postoperatively and during this paper reproduction.

[2]. Susan, S., et al., 2021, Unusual presentation of oral hemangioma in tongue and the potential use of propolis as an adjunctive treatment. *Clinical Case Reports*, 22:05243, 10.1002/ccr3.5243, https://pubmed.ncbi.nlm.nih.gov/34987814/

[3]. Rachappa, M. M., et al., 2010, Capillary hemangioma or pyogenic granuloma: A diagnostic

- dilemma. *Contemporary Clinical Dentistry*, 1:119-22, 10.4103/0976-237X.68593, https://pubmed.ncbi.nlm.nih.gov/22114397/.
- [4]. Vinay, K., et al., 2020, Robbins & Cotran Pathologic Basis of Disease, *Elsevier, Amsterdam, Netherlands*,
- https://shop.elsevier.com/books/robbins-and-cotran-pathologic-basis-of-disease/kumar/978-0-323-53113-9.
- [5]. Galletti, B., et al., 2021, Radiofrequency VS Cold Surgery to Treat Oral Papillomatous Lesions. *Iranian Journal of Otorhinolaryngology*, 33:87-91,

- 10.22038/ijorl.2020.38177.2256,
- https://pubmed.ncbi.nlm.nih.gov/33912483/.
- [6]. Azma, E., et al., 2018, Laser Treatment of Oral and Maxillofacial Hemangioma. *Journal of Lasers in Medical Sciences*, 9:228-232, 10.15171/jlms.2018.41,
- https://pmc.ncbi.nlm.nih.gov/articles/PMC6499563 /.
- [7]. Parvathidevi, M. K., et al., 2013, Management of haemangioma with sclerosing agent: a case report. *BMJ Case Report*, 15:2013200660, 10.1136/bcr-2013-200660,
- https://pubmed.ncbi.nlm.nih.gov/24130207/.