Journal of Research in Medical and Dental Science
2021, Volume 9, Issue 10, Page No: 5-7

Available Online at: www.jrmds.in
eISSN No.2347-2367: pISSN No.2347-2545

Oral Haemangioma: A Case Report

Saraswathi Gopal K, Srividhya S, Nagammai N*

Department of Oral Medicine and Radiology, Meenakshi Academy of Higher Education and Research, Faculty of Dentistry, Meenakshi Ammal Dental college, Chennai, Tamil Nadu, India

ABSTRACT

Haemangiomas are relatively common benign proliferative lesion of vascular tissue origin. They are considered to be benign tumors of infancy characterized by a rapid growth phase with endothelial cell proliferation, followed by gradual involution. It is most common in the head and neck but relatively rare in oral cavity. Most common primarily affected site is upper lip but they can also occur on buccal mucosa, tongue and palate. Treatment relays on the correct diagnosis of the lesion and on its anatomic locations. The purpose of the article is to report a case of haemangioma of buccal mucosa covering the clinical characteristics and methods for diagnosing these lesions with possible treatment strategies.

Key words: Benign tumors, Haemangioma, Oral cavity

HOW TO CITE THIS ARTICLE: Saraswathi Gopal K, Srividhya S, Nagammai N, Oral Haemangioma: A Case Report, J Res Med Dent Sci, 2021, 9(10): 5-7

Corresponding author: Nagammai N
E-mail ✉: nachiappannagammai@gmail.com
Received: 18/04/2021
Accepted: 15/09/2021

INTRODUCTION

Mulliken, et al. in 1982 proposed a classification system for vascular lesions based on the cellular method, dividing these lesions into two types [1]. The first type exhibits endothelial proliferation (haemangioma), with rapid growth, followed by gradual involution, meaning that 90% of cases resolve themselves before 12 years of age, and where as 5 to 10% occur in children up to 1-year old [2]. The second type does not exhibit proliferation of the endothelium (vascular malformation), is present at birth and remains throughout life, affecting around 0.3 to 1% of new born infants.

Haemangiomas are benign proliferative lesion of vascular tissue of vessels origin than closely resemble normal vessels. These lesions have greater number of endothelial cells than that of the required cells to line the lumen. They are relatively more common in head and neck areas but oral and perioral locations are uncommon. Location in these areas oral and perioral region cause aesthetic and functional impairment, depending on location [3].

Clinically haemangiomas present as a macule, papule, nodule, swelling or tumour of variable size ranging from few millimetres to several centimetres that may cause facial asymmetry and it is usually filled with blood imparting red or bluish-purple discolouration. Normally pulsatile and has higher temperature when compared to adjacent tissues. Consistency could be fibrous or elastic which may depend on the amount of connective tissue Depending on its location either superficial or deep may get disappeared momentarily on digital compression or Diascopy [4].

Sclerotherapy is one treatment options that has been used with great success on small lesions located in sites with aesthetic impact, where surgery could leave unattractive scarring [5]. The main objective of this article is to describe about the clinical characteristics and diagnostic methods of a case of a 62-year-old male patient with a haemangioma of the buccal mucosa.

CASE REPORT

A 62-year-old male patient reported to the department with the chief complaint of swelling in his inner aspect of the right check. History of presenting illness revealed patient was not aware of the existence of swelling in the right buccal mucosa as it did not hinder him with his speech or mastication and also no pain associated with it. Medical history revealed patient was diabetic and hypertensive for ten years and on regular medications. Review of system reveals no abnormalities detected.

On examination of the right buccal mucosa revealed presence of a single purplish dome shaped swelling extending along the occlusal plane level of 47,48 and 16,17 correspondingly (Figure 1). It measures 2cm X 3cm in its greatest dimension. It extends superiorly 2cm below the upper right buccal vestibule to inferiorly 2cm above the lower buccal vestibule. Anteriorly 5cm away from the retrocommisure region to 1cm away from retromolar region posteriorly. Surface of swelling is smooth with white keratotic area evident on the central part with evidence of Sharp cusp of 17(mesio and disto buccal cusp) and 47(disto buccal and distal marginal ridge) impinging on the swelling. On palpation reveals swelling is well defined, non-tender, non-pulsatile, and soft in consistency

and Diascopy test revealed no blanching (Figure 2). Thus, a provisional diagnosis of vascular lesion of the right buccal mucosa was given. Patient was subjected for colour doppler ultrasound which revealed a well-defined hypoechoic lesion with posterior acoustic enhancement seen in the superficial plane of right posterior buccal mucosa measuring 1.2 X 0.6 X 0.6 cm (Figure 3). Focal peripheral calcific specks (Figure 4) with a very little demonstrable internal vascularity (Figure 5) features suggestive of haemangioma with phleboliths. Later, which patient was subjected for complete hemogram and subjected for Sclerotherapy.

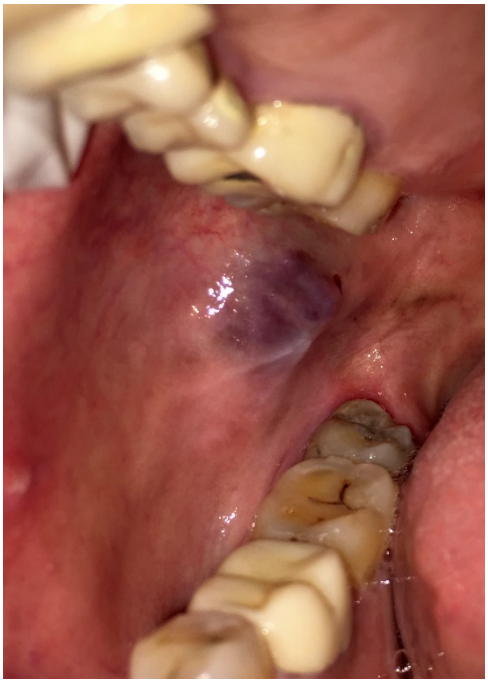

Figure 1: Intra oral lesion.

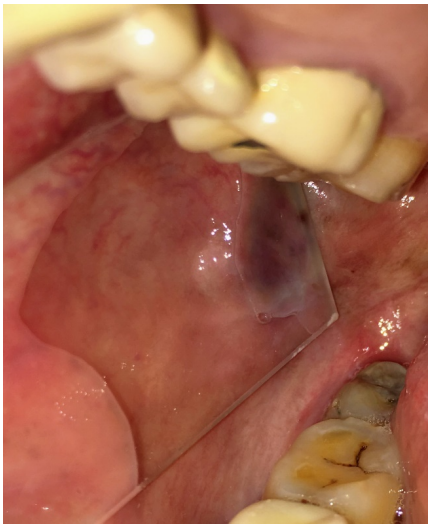

Figure 2: Diascopy test.

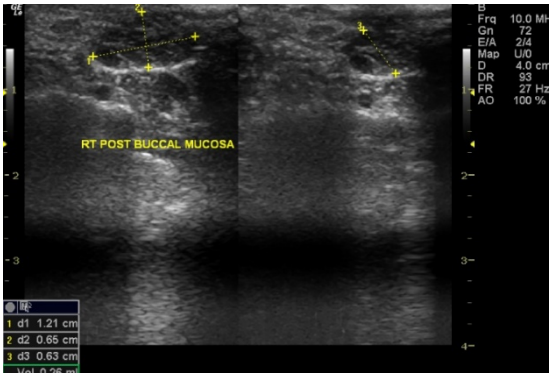

Figure 3: Posterior acoustic enhancement.

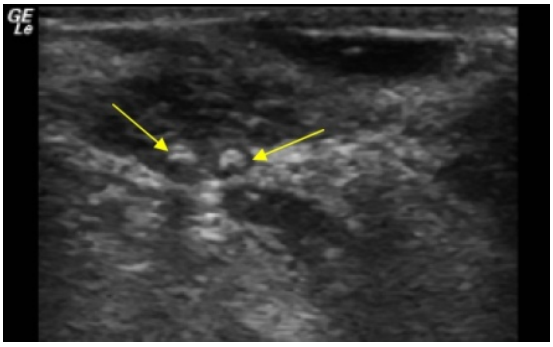

Figure 4: Phlebolith.

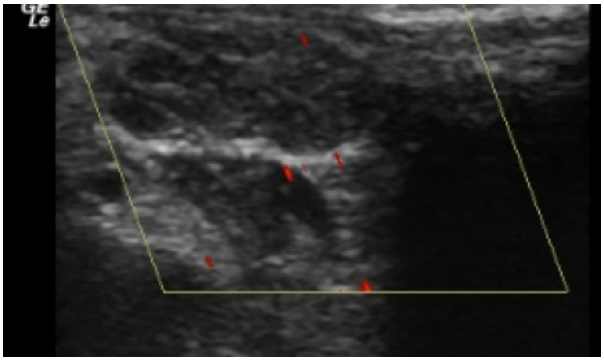

Figure 5: Scanty flow exhibited.

DISCUSSION

Haemangioma are the most common benign vasoformative tumours of infancy and childhood. International Society for the Study of Vascular Anomalies (ISSVA) [6] 2014 modified in 2018 has recently provided the classification where vasoformative tumors are broadly classified into vascular tumors, vascular malformation and associated syndromes. In vascular tumors it is further divided into benign vascular tumor (Haemangioma), Locally aggressive tumor (Kaposi sarcoma) and Malignant (Angiosarcoma).Haemangioma is histologically further classified into capillary and cavernous forms [7]. Capillary haemangioma is composed of many small capillaries lines by a single layer of endothelial cells supported in a connective tissue stroma of varying density, while cavernous haemangioma is formed by large, thin walled vessels, or sinusoids lined

by epithelial cells separated by thin layer of connective tissue septa.

Clinically, haemangioma appears as soft mass, smooth or lobulated, and sessile or pedunculated and may vary in size. They are usually deep red and may blanch on the application of pressure and if large in size, might interfere with mastication [8]. Syndromes associated with haemangiomas are PHACE syndrome, Sturge-webwer syndrome, Hereditary Haemorrhagic telangectasia, Kasabach Meritt syndrome and Von-Hippel Lindau syndrome [9].

Imaging technique such as ultrasonography with Doppler may be needed to determine the nature of the blood supply to the lesion either arterial or venous or arterio-venous malformation and can also aid with diagnosis [10]. MR angiography and CT angiography are needed to determine the feeding arteries, draining veins and the involving osseous structures. Classic finding in MR imaging is hypointense in T1 and Hyperintense in T2 where as it may become heterogenous when it is replaced by fat during involution phase. Variable vascularity is demonstrated with prominent flow voids denoting feeder artery along with surrounding perilesional edema [11].

Different treatment methods have been employed in attempts to control growth and bring forward regression of haemangiomas. For smaller and peripheral lesions, treatment options include sclerotherapy with sodium morrhuate, sodium psylliate, hypertonic glucose solution, and sodium tetradecyl sulphate and ethanolamine operate [12]. Other options are conventional surgical excision, laser treatment, radiotherapy, electrocoagulation and cryotherapy. For larger and/or intraosseous, lesions located in areas with aesthetic impact, treatment should consist of embolization or obliteration of the lesion and adjacent vessels, indicated with the objective of achieving involution of the lesion for a subsequent surgical procedure [13].

CONCLUSION

Vascular injuries in the head and neck are complex pathologies that are unlikely to be resolved if inappropriate treatment is chosen. Haemangioma is of benign origin and behaviour, but haemangioma in the oral cavity is of clinical importance. It often mimics other lesion clinically and requires appropriate clinical diagnosis and proper management.

REFERENCES

1. Mulliken JB, Glowacki J. Hemangiomas and vascular malformations in infants and children: A classification based on endothelial characteristics. Plast Reconstr Surg 1982; 69:412-422.
2. Neville BW, DammDD, Allen CM, et al. Patologia epitelial. In: Neville BW. Patologia oral & maxilofacial. Tradução de Danielle Resende Camisasa. 3rd Edn. Rio de Janeiro: Elsevier 2009; 363-453.
3. Açikgöz A, Sakallioglu U, Ozdamar S, et al. Rare benign tumours of oral cavity—capillary haemangioma of palatal mucosa: A case report. Int J Paediatr Dent 2000; 10:161-165.
4. Enzinger FM, Weiss SW. Soft tissue tumors, Mosby, St. Louis, Mo, USA, 5th Edn 2001.
5. Chin DC. Treatment of maxillary hemangioma with a sclerosing agent. Oral Surg Oral Med Oral Pathol 1983; 55:247–249.
6. Lee JW, Chung HY. Vascular anomalies of the head and neck: Current overview. Arch Craniofac Surg 2018; 19:243.
7. Griauzde J, Srinivasan A. Imaging of vascular lesions of the head and neck. Radiologic Clin 2015; 53:197-213.
8. Trivedi K, Soni A, Meshack R, et al. Intraoral hemangioma: An overview of the clinical entity. J Int Clin Dent Res Organization 2015; 7:79.
9. Nozaki T, Nosaka S, Miyazaki O, et al. Syndromes associated with vascular tumors and malformations: A pictorial review. Radiograph 2013; 33:175-95.
10. Nair SC. Vascular anomalies of the head and neck region. J Maxillofac Oral Surg 2018; 17:1-2.
11. Bhat V, Salins PC, Bhat V. Imaging spectrum of hemangioma and vascular malformations of the head and neck in children and adolescents. J Clin Imaging Sci 2014; 4.
12. Khunger N, Sacchidanand S. Standard guidelines for care: Sclerotherapy in dermatology. Indian J Dermatol Venereol Leprol 2011; 77:222.
13. Abraham A, Job AM, Roga G. Approach to infantile hemangiomas. Indian J Dermatol 2016; 61:181.