

Case Report on Hemangioma

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Abstract

Vascular anomalies comprise a widely heterogeneous group of tumours and malformations. Haemangioma is the most common benign tumour of vascular origin of head and neck region most commonly found on lips, tongue, buccal mucosa and palate. Despite of its benign origin and behaviour, it is always of clinical importance to the dental profession and requires appropriate management.

This case of palatal haemangioma mimicked itself as multiple palatal abscesses on visual examination that lead to the confusion. The objective of this case report is to create awareness and familiarity to such an unusual presentation so that the lesion can be diagnosed and managed appropriately.

This case report brings out a new dimension to a periodontist, the way a haemangioma can present and the importance of appropriate diagnosis and management, as haemangioma can lead to a life threatening bleeding.

Keywords: heamangioma, sclerothreapy, vascular malformation

Introduction

Hemangioma is a term that encompasses a heterogeneous group of clinical benign vascular lesions that have similar histologic features.¹ It is a benign lesion, which is a proliferating mass of blood vessels and do not undergo malignant transformation. There is a higher incidence in females than males. Although a few cases are congenital, most develop in childhood.¹ Occasionally, older individuals are affected.^{1,2} The congenital hemangioma is often present at birth and may become more apparent throughout life.¹

Clinically hemangiomas are soft, sessile or pedunculated, and painless. They may be smooth or irregularly bulbous in outline. The color varies from deep red to purple and the tumor blanches on the application of pressure. Periodontally, these lesions often appear to arise from the interdental gingival papilla and to spread laterally to involve adjacent teeth.³

They may be cutaneous, involving skin, lips and deeper structures; mucosal, involving the lining of the oral cavity; intramuscular, involving masticator and perioral muscles; or intra-osseous, involving mandible and/or maxilla.^{4,5} Hemangioma is further sub classified based on their histological appearance as: (1) capillary lesions; (2) cavernous lesions; and (3) mixed lesions.⁶ A sclerosing variety also occurs that tends to undergo spontaneous fibrosis.⁷



Fig 1. Patient

Fig 2. Intra-oral presentation

Case report

A female patient aged 19 years, referred to the Department of Periodontology and Oral Implantology, Post Graduate Institute of Dental Sciences, Rohtak, with a provisional diagnosis of multiple palatal abscesses in the upper left region. The patient reported with a chief complaint of swelling in upper left region palataly since eight months and bleeding gums on brushing from upper left region since five months. However, there was no pain, but slight discomfort while eating. The swelling was initially smaller in size involving only the posterior left region of the hardpalate, which gradually increased and stabilized after three to four weeks to the present size involving the entire left half of the palatal region.

General examination

The patient was normally built for her age with no defect in gait or stature. There was no relevant medical history with no history of abnormal bleeding, anywhere else from the body.

Intra-oral examination

On intra-oral examination, the inspection reveals, the swelling circumscribed the area from the left maxillary central incisor to the left maxillary tuberosity area in length and from the marginal gingiva of the teeth in that area till the mid palatal raphe in width. The area was deep dull red in color with erythematous marginal gingiva and no well-defined border. Surface ulcerations in the area of maxillary tuberosity were noted. On palpation, the swelling blanched on pressure, was of pulsatile nature. The pulsatile natures lead to the suspicion of a vascular lesion. The marginal gingiva bleeds profusely on probing. No mobility was noted in any of the tooth. The patient was not able to maintain good oral hygiene in the area of the swelling because of bleeding on brushing.

Investigations

Following clinical examination and detailed history, with a suspicion of a vascular lesion, a second opinion was taken from the oral surgery department. A CT scan was advised to inspect the extent of the lesion along with the histopathological examination to arrive at a diagnosis and for further treatment planning treatment planning.

A gingival biopsy was taken from the lesion, producing profuse hemorrhage controlled by pressure with gauze which was sent for histopathologic examination along with periodontal pack placed thereafter.

Histopathologic examination of the excised tissue revealed nonkeratinized stratified squamous epithelium overlying on connective tissue stroma consisting of many thin-walled capillary channels. The capillaries were lined by a single layer of endothelial cells. Some areas showed marked endothelial cell proliferation. Sparse plasma cells and lymphocytes were seen scattered throughout stroma.



Fig 3. During Sclerotherapy

Management

Thorough scaling and root planing was carried out with appropriate measures to control the bleeding. For the vascular part of the lesion, sclerotherapy with sodium tetra-decylsulphate was the treatment of choice. Post-operative dexamethasone and non-steroidal anti-inflammatory medication were prescribed.

Discussion

Regarding treatment, most true hemangiomas require no intervention; they undergo spontaneous regression at an early age.⁸ Patients with hemangioma may be treated with medical therapy, surgical resection, embolization with occlusive materials, or sclerosis therapy with liquid agents. Most hemangiomas are managed by conservative regional approaches that include corticosteroids (either systemic or local injection), interferon- α , laser therapy, embolization, cryotherapy and radiation. Systemic corticosteroids, interferon- α may cause adrenal. Laser therapy may result in skin atrophy, transient hyper-pigmentation, slight depression of the skin, and scarring or permanent hyper-pigmentation in addition to higher costs to the patient. Cryotherapy may also result in scarring and hyperpigmentation.^{9, 10}

The main role of medical therapy is to provide the initial approach for control of rapidly growing hemangiomas or cases in which functional compromise is unavoidable. Surgical excision was at one time the only treatment option but is often technically difficult because the lesions may be infiltrative and involve vital structures. Also as it carries the disadvantages of intra-operative and postoperative bleeding and post-operative scarring. It might also necessitate secondary reconstruction.¹¹

In the present case, sclerotherapy was chosen as the modality for treatment because of the large extent of the lesion covering almost half of the palate and to avoid any risk of palatal bone exposure or perforation or damage to the maxillary nerve intra or post-operatively. Moreover, Sclerotherapy decrease the lesion size and changes its nature to more fibrous consistency and does not present the risk of hemorrhaging, is a non-invasive method, and maintains a low cost.

The prognosis of hemangioma, in general, is excellent since it does not tend to recur or undergo malignant transformation following adequate treatment.¹²

In the case presented here, the patient was recalled at regular intervals and no sign of recurrence was reported till one year follow-up.

Conclusion

Early detection and biopsy is necessary to determine the clinical behavior of the tumor, to ascertain the treatment plan and to avoid the potential dentoalveolar complications intra and post operatively. This case of palatal haemangioma mimicked itself as multiple palatal abscesses on visual examination. The objective of this case report is to clear awareness and familiarity to such an unusual

presentation of hemangioma and the importance of appropriate diagnosis and management as hemangioma can lead to a life threatening bleeding.

Although a rare benign tumor of the oral cavity, capillary hemangioma is important to the periodontists because of its associated gingival vascular features and complications which hinder the day to day activity and can lately impair the systemic health of the affected individual.

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