

Oral Hemangioma - A short review

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ABSTRACT-

Vascular elements or benign lesion of the blood vessels are called as hemangioma. Most of them are present at birth which are developmental in nature. Vascular lesions may be of hemangioma or lymphangioma. In some instances lesions are probably a mixture of hemangioma and lymphangioma, leading to the term angiomatosis. The color varies from bluish to purple or fiery red.

INTRODUCTION

Hemangioma is the most common benign vasoformative tumors of infancy and childhood which is usually manifested within the first month of life, exhibiting a rapid proliferative phase and slowly involute to near complete resolution¹. The benign, localized tumor of the blood vessels is called as hemangioma. Most of the benign vascular lesions occurring in the head and neck region have a malformation which is a hamartomatous basis.

PATHOGENESIS

The etiology and pathogenesis remains unknown. It is reported that childbearing age, gestational hypertension and infant birth weight may be related to the formation of hemangioma². The focal proliferation of endothelial cells results in hemangioma, although the cause behind this remains unclear. The positive staining for GLUT1 is considered to be highly specific and diagnostic for hemangioma. More recently, somatic mutational events in gene involved in angiogenesis are related to hemangioma growth³.

CLASSIFICATION

Hemangiomas are classified by Shafer et al (1993) as follows

- Capillary hemangioma
- Cavernous hemangioma
- Angioblastic or hypertrophic hemangioma
- Racemose hemangioma
- Diffuse systemic hemangioma
- Metastasizing hemangioma
- Nevus vinosus or port-wine stain
- Hereditary hemorrhagic telangiectasia

CLINICAL FEATURES

Clinically hemangiomas are characterized as a soft mass, smooth or lobulated, sessile or pedunculated. It measures from a few millimeters to several centimeters in size. The color of the lesion ranges from pink to red purple and tumor blanches on the application of pressure. It occur either spontaneously or after minor trauma. They are generally painless. These tumors are mostly seen on the face, fingers and occasionally seen on oral mucosa. Oral hemangiomas are usually seen on the gingiva. It occurs less frequently at other sites as a capillary or cavernous type more commonly capillary⁴. Periodontally, these lesions often appear to arise from the interdental gingival papilla and to spread laterally to involve adjacent teeth⁵. Hemangioma is histologically also classified into two forms as capillary and cavernous. The hemangioma is a tumor of mesenchymal origin, which is characterized by the formation of vascular tubes of endothelial cells. Capillary hemangiomas are composed of small thin-walled vessels of capillary size which is lined by a single layer of flattened or plump endothelial cells and surrounded by a discontinuous layer of pericytes and reticular fibres⁶. Cavernous hemangiomas comprises of deep, irregular, dermal blood-filled channels with tangles of thin-walled cavernous vessels or sinusoids that are separated by a scanty connective tissue stroma. Mixed hemangiomas contain both components and may be more common than the pure cavernous lesions⁶.

MANAGEMENT

The management of hemangiomas and the treatment of choice depend on several factors including the age of the patient and the size and extent of the lesions, as well as their clinical characteristics. Some congenital lesions may undergo spontaneous regression at an early age⁷. Small and superficial lesions may be completely excised. In few cases, emergency surgery may become mandatory when arterial bleeding arises from intraosseous hemangiomas of the jaw following simple tooth extraction⁸. Various treatments have been used in the management of hemangiomas, including oral corticosteroids, intralesional injection of fibrosing agents, interferon α -2b, radiation, electrocoagulation, cryosurgery, laser therapy, embolization and surgical excision^{9,10,11}.

CONCLUSION

Haemangioma is of benign origin and behaviour. Haemangioma in the oral cavity should be given clinical importance as it mimics other lesion clinically and requires appropriate clinical diagnosis and proper management. Certain cases of the hemangioma do not regress with time and may present with complication that requires treatment.

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