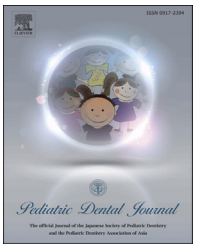
PEDIATRIC DENTAL JOURNAL XXX (2018) 1–5

Available online at www.sciencedirect.com

Pediatric Dental Journal

journal homepage: www.elsevier.com/locate/pdj



Case Report

# A rare case of multiple benign tumors of gingiva in a 4 year old child

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ARTICLE INFO

*Article history:*
Received 16 February 2018
Received in revised form
21 May 2018
Accepted 13 June 2018
Available online xxx

ABSTRACT

Hemangioma is a benign proliferation of blood vessels closely simulating normal vessels which may present at any age from birth to old age. Hemangiomas have a typical clinical pattern of rapid proliferation followed by involution, during which these may present with sudden increase in size raising suspicion of malignancy. However, they almost never turn malignant but occasionally may permeate all tissue barriers in an aggressive fashion. Infantile hemangioma is a form of benign vascular tumour presenting commonly in the head and neck region. This case report presents a very rare case of multiple benign lesions of infantile hemangioma in gingiva with a discussion of the relevant diagnostic and treatment modalities.


## 1. Introduction

Vascular lesions of infants and children are classified into two major types: vascular tumors and vascular malformations. Originally, described by **Mulliken and Glowacki** in 1982 [1], the most current and widely accepted classification has been given by International society for study of vascular anomalies (ISSVA) [2]. The current classification system describes Infantile Hemangiomas as benign vasoformative tumors of infancy and childhood, characterized by abnormal proliferation of endothelial cells and aberrant blood vessel architecture while vascular malformations are structural anomalies and inborn errors of morphogenesis [3]. Although recognised since centuries, these lesions were first described by **Lister** [4]. Common terminologies used for Infantile Hemangioma [5] are (juvenile hemangioma, benign infantile hemangioendothelioma, cellular hemangioma of infancy, immature hemangioma and strawberry nevus). According to recent literature review, it has an incidence of 4–5% with higher predilection in female gender [4]. A higher incidence has been observed in Caucasians, infants with low birth-weight or preterm birth and in cases of

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https://doi.org/10.1016/j.pdj.2018.06.001
0917-2394/

Please cite this article in press as: Sethi PA, et al., A rare case of multiple benign tumors of gingiva in a 4 year old child, Pediatric Dental Journal (2018), https://doi.org/10.1016/j.pdj.2018.06.001

advanced maternal age. Also, multiple gestations, use of maternal fertility drugs, breech presentation, placenta previa, preeclampsia, chorionic villus sampling and placental abnormalities are possible risk factors [3,4]. (see Figs. 1–5)

The clinical appearance of Infantile hemangioma varies greatly in location, size, depth and rate of growth. It usually presents itself as red multinodular lesion with a thin overlying skin (60% of cases) [6] of chin and upper neck, less commonly in parotid area. It may also present itself in subcutaneous tissue, mucous membranes of lips, mouth, or internal viscera while rarely occurring in gingiva. Deep seated lesions may appear normal in color, hence might go undiagnosed. The lesions typically appear 2–6 weeks after birth and rapidly enlarges to maximum size (usually 4–8 cm) by 6–9 months of age. These lesions may remain static for 2–6 months after which they involute over years leaving behind a firm, fibrotic and multinodular lesion [7]. The classic appearance and evolution have given it the designation "strawberry naevus" [8].

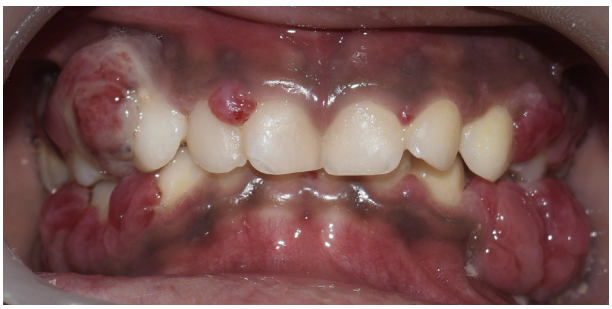

**Fig. 1 – Frontal view of dentition in occlusion.**

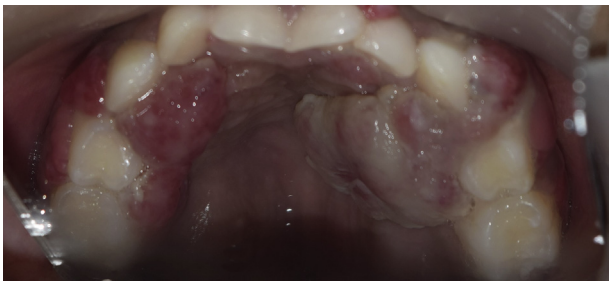

**Fig. 2 – Occlusal view of the maxillary arch.**

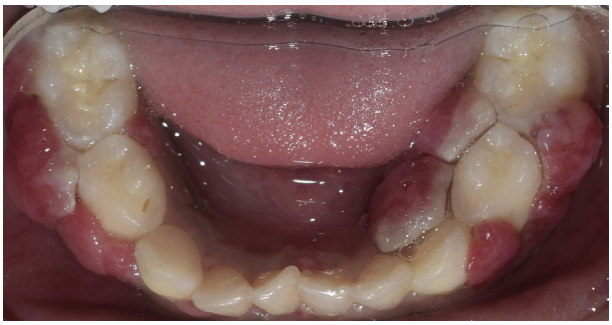

**Fig. 3 – Occlusal view of the mandibular arch.**

Literature reveals that 80% of patients present with solitary lesions, presence of more than four or more lesions in a patient is rare [6]. Though presence of solitary lesions of infantile hemangioma in gingiva have been reported [5,9], there have been no reported cases of multiple lesions of infantile hemangioma in gingiva. Hence this case report discusses a rare

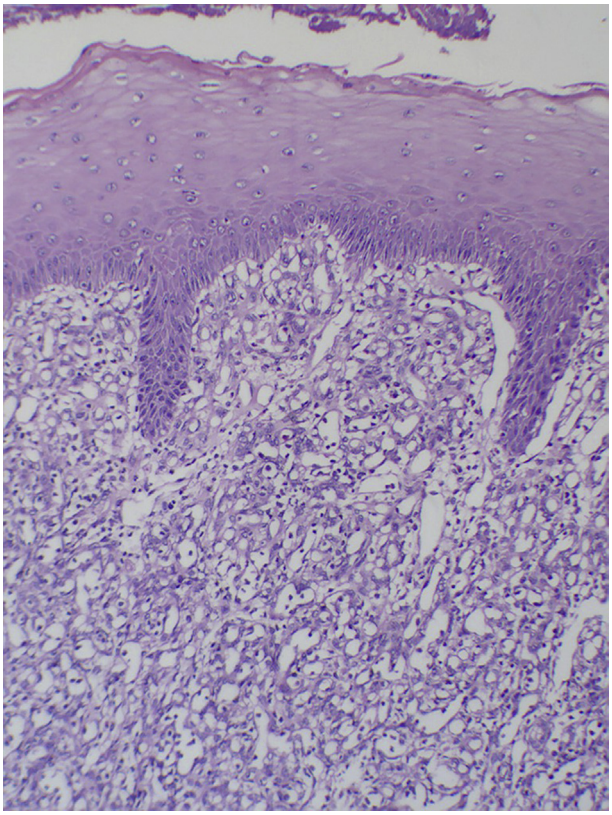

**Fig. 4 – The H&E stained section shows mature connective tissue stroma with abundant proliferating endothelial lined blood vessels.**

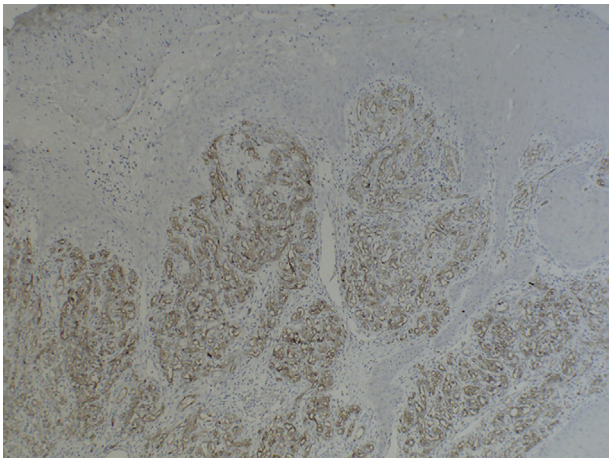

**Fig. 5 Immunohistochemical analysis slide depicting the lesions were positive for CD34 which is a surface glycoprotein seen as blood vascular endothelial marker.**

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