

Gingival Epulis, An Enigma for Clinical Diagnosis: A Case Report

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Abstract: *The word epulis refers to a localized growth or enlargement of the gingiva, which could be a associated development either of a systemic, environmental or local background. Clinical diagnosis of these presentations is highly complex as it could be an array of enlargements related to tumors, cysts and otherwise growth related to specific and non specific origin. Following is a case report of a patient who presented to our clinic with a growth present in relation to upper right maxillary premolar region, diagnosis of the case was difficult, biopsy was done and treatment instituted.*

Keywords: Epulis, Epulides, Giant cell granuloma, peripheral giant cell granuloma, Giant cell epuli

1. Introduction

Epulis is a growth like condition related to gingiva and associated structures². It is a non specific entity which resembles cysts or tumor like growth related to gingiva⁴. The characteristic feature which aids in diagnosis histologically is the presence of changes in the epithelium⁶ or the connective tissue. Dysplastic changes seen epithelially is predominantly more of a malignant growth⁸ related to squamous cell carcinoma, verrucous growth. Connective tissue changes show the more common presentations such as pyogenic granuloma, fibrous hyperplasia, and peripheral ossifying fibroma¹. This paper reviews the clinical and histologic feature of a long standing case of epulis with a doubted diagnosis.

2. Case Report

A 65 year old patient reported to our clinic complaining of growth in the upper part of her mouth. The growth he claims has been there since 20 years. He has had treatment done in his home country several times, but it keeps recurring. The treatment which was given to him involves excision of the growth and medications.

A. Clinical Examination

The patient was examined clinically and also Medical and Past dental history was recorded. Apart from borderline Blood pressure, no significant finding was seen. The patient was not under any medication and did not have any habits that could predispose to the growth. Intraoral examination revealed a swelling in relation to upper right premolar region which was pedunculated, 3x3cm in size, placed labio-palatally reddish pink in appearance coronally with a distinct erythematous border at the margins, non fluctuant swelling. There was profuse bleeding on probing, lesion was painless. With the exception

of a few teeth, the gingival and periodontal status of all teeth were satisfactory. Radiographically no abnormalities were detected. Diagnosis was provisionally labelled as chronic localized marginal gingivitis with gingival swelling in relation to upper premolar region 14 and 15. The growth was excised using a 980nm diode laser and sent for biopsy. The patient was given analgesics Mephenamic acid 500mg to be taken if pain was present and asked to rinse with chlorhexidine mouthwash 0.12% for a period of two weeks and was asked to report to the clinic after two weeks.

B. Histopathological Analysis

The tissue was of polypous formation and was covered entirely by non-keratinized squamous epithelium. The squamous epithelium demonstrated hyperplastic changes and the underlying stroma is with alternated areas of fibrosis, subsequently the diagnosis was confirmed as fibroepithelial polyp (Epulis)

3. Discussion

Unlike some of the lesions with less angiogenesis such as peripheral ossifying fibromas and certain focal hyperplasias⁷, in these lesions the tendency to complicate and become secondarily involved is minimal⁵. Carbone has indicated gingival epulis slightly for a male predilection, whereas Hasegawa⁸ and other authors have indicated a female predilection. Presence of multinucleated giant cells in a polypous formation is an indication of an erythematous presence clinically, where frank bleeding can be seen³. In most cases alternate areas of fibrosis⁹ with squamous epithelium demonstrating hyperplastic changes¹⁰ is visible. The predominant finding in majority of the cases is the presence of non keratinized epithelium which gives further reason to investigate as no amount of irritation clinically will cause

dysplastic changes unless the tissues are overwhelmed by cells contributing to changes internally. Though in the present case all the contributory factors led to the lesion being dormant for a very considerable period of time, it did not contribute to any dysplastic changes within the combined strata leading to any malignancy. Factors that can contribute otherwise such as habits, systemic and other local factors play a significant role, but it has to be adjunct with contributory cellular changes to produce any desired effect.

4. Conclusion

Gingival growth-Epulis could be non contributory to a eventual outcome which can be associated pathologically. Most of the presentations are tumor like and associated with erythematous borders and bleeding on palpation. It could be a part of a systemic factor related hormonally or a local factor associated with habits. Differential diagnosis has to be established and biopsy is mandatory to establish the characteristic of the lesion. In most cases lesions tend to be dormant without involvement of supporting structures, whereas in some, rapid involvement is seen. Patients should be put on a follow up and medical intervention be carried out at the earliest to rule out any developments.

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Figure 1: Epulis

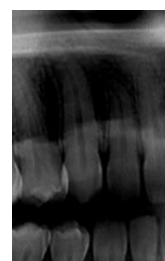


Figure 2: RVG



Figure 3: Biopsy



Figure 4: After 1 month

Author Profile



Dr Sudhir Varma received his Bachelor of dental surgery and masters in periodontics from Mangalore University, Karnataka, India in 1993 and 1997 respectively. He was appointed as a reader in AB Shetty dental college in the dept of periodontics from 1997-98, following which he went to Dubai, UAE in 1998 and joined private practice. He is currently Assistant professor in periodontics at Ajman University of science and technology and a specialist periodontist at Dr Mohd Rafi dental clinic at Dubai, UAE. He has taken Fellowships in Laser dentistry from University of Genoa, Italy and also has standard proficiencies in diode, CO₂ and erbium wavelengths. His area of research interest is lasers in periodontics and surgical periodontics.