

Journal of Advanced Medical and Dental Sciences Research

@Society of Scientific Research and Studies *NLM ID: 101716117*

Journal home page: www.jamdsr.com doi: 10.21276/jamdsr Indian Citation Index (ICI) Index Copernicus value = 100

(e) ISSN Online: 2321-9599;

(p) ISSN Print: 2348-6805

Case Report

A Case report of Pyogenic Granuloma

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Received: 22 January, 2024

Accepted: 24 February, 2024

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This article may be cited as: Singh P, Bhasin M, John A, Gupta V. A Case report of Pyogenic Granuloma. J Adv Med Dent Scie Res 2024;12(3):38-40.

INTRODUCTION

Pyogenic Granuloma is the most common oral lesion. It is also known as 'Granuloma pyogenicum'. It is characterized by localized granulation tissue overgrowth due to irritation or trauma in associated region. It was first described by Poncet and Dor in 1897. The name 'pyogenic granuloma' is a misnomer since the condition is not associated with pus and does not represent a granuloma histologically. Its etiology is still not clear but some believe that it is due to botryomycotic infection, other believe that it is due to minor trauma or chronic irritation. It can occur at any age, most predominantly in female¹.

It has been noted that increased incidence of this lesion in female during pregnancy, puberty due to increased levels of estrogen and progesterone hormone which may lead to increased vascularization at associated area. It may occur on lips, palate, tongue, buccal mucosa, but most commonly seen in gingiva².

It is presented as single nodule or lobulated small in size with few millimeters to centimeters. It may be deep red to pinkish in color due to increased vascularization³.

CASE DESCRIPTION

A 45-year-old male patient was referred to the department of Oral Medicine & Radiology of Hitkarini Dental College and Hospital with the chief

complaint of growth on gums in right front tooth region of jaw since 1 year.

History revealed that patient noticed a small growth over gums in right lower front tooth region of mouth 1 yr ago and it had progressively increased. Growth was associated with bleeding on brushing occasionally. Patient complains of discomfort while eating. Patient also gave history of trauma on lower anterior gums during brushing 6-7 months back ago. Growth was not associated with pain or discharge. Patient medical history revealed that he was hypertensive since 4-5 years and under medication for the same. Patient personal history revealed he brushes once daily with hard bristle brush with fluoridated tooth paste.

No abnormality detected during extra-oral examination. On intra-oral examination a solitary, ovoid, sessile growth measuring 1x 1.5 cm approximately was present on right side of gingiva in the interdental spaces between 43 and 44. Extending mesiodistally from distal aspect of 43 up to the imaginary bisecting line distal to 44, superiorly extending superiorly from interdental gingiva of 43 and 44 up to 1 cm below the marginal gingiva. Same color as the adjacent gingiva with the distal half being more reddish in color. Growth is oval in shape, size of 1x 1.5 cm in its greatest dimensions. Borders are well defined, surface is lobulated and no secondary changes were seen related to ulcerations.



Fig 1 Front Profile of Patient



Fig 2 Growth around Gingiva

On palpation all inspectory findings are confirmed on palpation, Consistency of growth is soft, non tender on palpation with mild bleeding was seen on probing. It was non fluctuant, non Pulsatile, Non reducible and Non compressible
On this basis provisional diagnosis is made as Pyogenic Granuloma. on further examination patient is

advised for IOPA of 43 and 44. IOPA revealed no distinct changes around 43 and 44
Due to the relatively small size of the lesion, an excisional biopsy, along with histopathologic evaluation was recommended as the diagnostic approach.



Fig 3 Excision of growth

The histopathological examination revealed Parakeratinized stratified squamous epithelium with long slender rete ridges and connective tissue stroma. The underlined connective tissue stroma shows

numerous endothelium lined blood vessels with extravasated RBCs, Dense infiltrating infiltrate chiefly lymphocytes are seen. Moderate dense collagen bundle interspread plum fibroblast

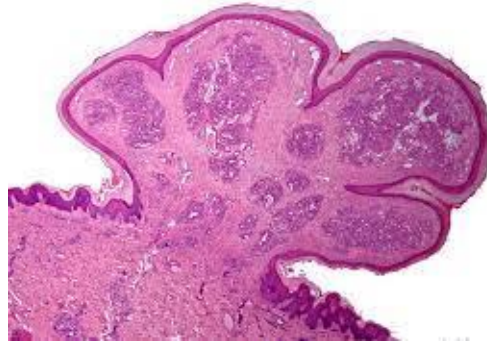


Fig 4 histopathology report of growth

These findings were consistent with a histopathological diagnosis of pyogenic granuloma.

DISCUSSION

Pyogenic Granuloma is the most common tumour of the oral cavity⁴. Around 77% of cases it is commonly found in interdental papilla of gingival. The most common cause is irritational, trauma. They are non cancerous growth and may effect patient eating or esthetically inappropriate for patient⁵. They may bleed easily due o increase blood supply and extravastion of RBCs⁶. There clinical appearance is usually lobulated, sessile or pedunculated growth. The surface can be ulcerated with a yellow-fibrinous surface, and easy bleeding. With time, the lesion becomes a paler pink colour⁷.

Although pyogenic granuloma an be diagnosed clinically with considerable accuracy, radiographic and histopathological investigations, aid in confirming the diagnosis and treatment. Radiographs are advised to rule out bony destruction suggestive of malignancy or to identify a foreign body⁸.

All pyogenic granuloma should be rule out with other serious conditions like malignancy with the help of biopsy and histopathological investigations should also be done in order to get accurate diagnosis which reveals many dilated blood vessels in a loose edematous connective tissue stroma. There is typically a dense acute inflammatory infiltration but this may be scanty or absent⁹.

Treatment modalities for pyogenic granuloma is surgical excision and its recurrence rate is also less¹⁰.

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