# **Original Research Paper**

**Dental Science** 

# **EPULIS FISSURATUM - A MEDICAL LINE OF TREATMENT**

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**ABSTRACT** Epulis fissuratum is an inflammatory condition seen in oral cavity 1. This is caused due to trauma of ill fitting denture. Epulis fissuratum is commonly seen in elderly patients with poor oral and denture hygiene maintenance 2. It's a type of inflammatory hyperplasia that is reactive tissue growth to stimulus like pyogenic granuloma, fibroma etc. it was once thought to be candida associated. We present a case of 50 yr old female patient who had extensive epulis fissuratum treated with medicines and oral and denture hygiene instead of surgery.

# **KEYWORDS**: IH-Inflammatory hyperplasia, Epulis fissuratum, Tumor like growth.

#### Introduction:-

In our practice we come across many growths inside the mouth which are treated by oral prophylaxis, correction of prosthesis, coronoplasty of sharp tooth and surgery. In our practice we have treated a case of epulis fissuratum medically which otherwise would have gone for surgical excision. We are reporting a case of epulis fissurartum treated medically.

#### Case report:-

A 50 yr old female patient came to our oral medicine and radiology department, Panineeya dental college with a complaint of painful growth and swelling in mouth and swelling on face since 3 days when the patient presented to us. She gave history of diabetes treated with hypoglycemic drugs- Metformin 500mg since 20yrs. She was surgically menopaused approximately 30 yrs back after hysterectomy. Patient was complete denture wearer since 20years.

On examination, extraorally there was diffuse erythematous swelling on left part of face extending from midline or philtrum laterally to lower zygoma superiorly ala of nose and left infra orbital region. It was 5cm anterior to left tragus of ear. Swelling was soft and tender on palpation. [Figure 1] figure 2]



Figure 1-Extra oral swelling seen on left side of the face



Figure 2 – Denture flange like soft tissue growth on left upper labial and buccal vestibule (first visit)

Intra oral examination revealed completely edentulous ridges. There was an ulceroproliferative growth in the left labial and buccal vestibule in relation to teeth left upper central to left second premolar. There was a soft tissue hyperplasia resembling a denture flange. The denture flange fitted into the deep groove of the lesion. [figure 2]. There was an ulcer with whitish slough and debris. The denture on examination was poorly maintained. It was fitting well. The lesion was tender on palpation.

The patient was asked to stop wearing denture. The denture was cleaned in the department of prosthodontics. The patient was given denture hygiene instructions. She was told to massage the ridges other than lesion area. Then she was asked to put the denture in a bowl of water containing effervescent denture cleaning fittadent tablets. She was advised to get random blood sugar level checked; the results showed more than 200mg/dl that is uncontrolled diabetes. The patient was told to go to medical physician for control of diabetes.

She was prescribed systemic antifungal medication<sup>3</sup>. Tab Fluconazole 150mg once daily for seven days, topical 1% clotrimazole to apply four to five times daily for a period of seven days, topical application of Hexigel four times daily which consists of chlorhexidine gluconate was prescribed for a period of seven days. On the eight day there was complete resolution of facial swelling. 60% reduction in size of epulis fissuratum. Ulcer had healed to some extent with reduction of erythema. [figure 3]



Figure 3:- During 2nd visit of treatment (on the eight day)

She was asked to continue the same medications and same

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instructions to follow. On the 15<sup>th</sup> day, there was almost complete resolution of epulis fissuratum with very slight erythema.[figure 4] The patient was asked to wear dentures with proper instructions even though she had used denture in between the treatment for esthetic reason. She was asked to maintain diet and exercise for controlled diabetes.



Figure 4:- Complete healing of the lesion after 2 weeks

#### **Discussion:-**

Inflammatory or reactive hyperplasias (IH) are the lesions which are seen in response to irritants which act as stimulus in oral cavity or other parts of the body. In oral cavity, IH could be due to poor oral hygiene. These are a group of lesions which can called under the name inflammatory hyperplasias. They include pyogenic granuloma, fibroma, epulis fissuratum, , hormonal tumor, papillary hyperplasia, traumatic hemangioma, parulis, epulis granulomatosum, peripheral giant cell granuloma and the peripheralfibroma with calcification<sup>1</sup>.

'Epulis' means growth on gingiva. Epulis fissuratum is a type of inflammatory hyperplasia, which is caused due to ill fitting dentures and poor denture hygiene<sup>3</sup>. This is mostly seen in post menopausal women and uncontrolled diabetics<sup>4</sup>. The lesion is typically seen at the areas where the denture flanges touch the oral mucosa. It could be ulcerated or groove may be present into which the denture flange fits <sup>56</sup>. There is exophytic, denture flange like soft tissue growth on the facial aspect of denture flange which mimics tumor will be present. Old school of thought says that it could be due to candidiasis even though exact evidence is not found.

In our case the denture was fitting well but, oral and denture hygiene was poor. She had uncontrolled diabetes and she had surgical menopause. These could be the factors which initiated and influenced growth of epulis fissuratum. The lesion is slightly painful. Since epulis fissuratum is diagnosed by its clinical presentation and presence of denture, we did not go for biopsy.

#### Conclusion:-

Usually for such a big growth, surgery in the form of laser, cryosurgery will be done. In our case medical line of treatment was successful. There is no recurrence of the lesion since past 2yrs. The regimen used consisting of antifungal drug like Tab Fluconazole 150mg once daily for 2 weeks, topical 1% clotrimazole to apply daily four to five times for 2 weeks, topical application of Hexigel four times daily along with denture hygiene instructions and control of diabetes or any immunosuppressed conditions will be beneficial and can be tried out before or instead of surgery. Antifungal agents, fluconazole given systemically as well as topically (1% clotrimazole) along with topical hexigel which has chlorhexidine gluconate are found to be effective in treatment of epulis fissuratum.

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