



## Case Study

# Non- Neoplastic Hyperactive Lesion of Gingiva with Sever Alveolar Bone Loss: Unusual Clinical Finding

Khan Mohammad Arif <sup>1,\*</sup>, Tripathi Amitandra K <sup>1</sup>, Jaishwal Rajeev K <sup>1</sup>, Singh Brijendra K <sup>2</sup>, Agrawal Ankit <sup>3</sup>

<sup>1</sup> Department of Periodontology, Institute of Dental Sciences and Hospital, Lucknow, Uttar Pradesh, India.

<sup>2</sup> Department of Periodontology, Chandra Dental College, Barabanki, Uttar Pradesh, India.

<sup>3</sup> Department of Periodontology, Institute of Dental Sciences and technology, Modinagar, Uttar Pradesh, India.

### ARTICLE INFO

### ABSTRACT

Received: 27 May 2015  
Accepted: 20 Jun 2015

Benign hyperactive lesion of gingiva is a reactive tumor like growth which arises due to various stimuli such as low grade long duration local irritation and minor trauma. They are more commonly seen in anterior region of maxillary arch on facial aspect with rare loss of alveolar bone on affected site. This report presented case of pyogenic granuloma on posterior region of maxillary arch with severe loss of alveolar bone on affected site

**Keywords:** Benign, Gingiva, Maxillary, Granuloma..

## 1. INTRODUCTION

Term “pyogenic granuloma” or “granuloma pyogenicum” was introduced by Hartzell in 1904.<sup>1</sup> PG is non-neoplastic common tumor-like growth of oral cavity or skin. It is mostly presents as a smooth or lobulated exophytic painless lesion on gingiva with, penduculated, or sessile base.<sup>2</sup> Lesions more common on the maxillary gingiva than mandibular gingiva and anterior region of arches are more commonly affected than posterior regions.<sup>3</sup> It may occur in all ages but

### Corresponding author \*

Dr Mohammad Arif Khan  
H.N. 25, Dak Bangla Road, Ghosi, Mau, Uttar Pradesh, India  
E Mail: makperio013@gmail.com

most commonly in the second decade of young female adult. Clinically it is characterized by asymptomatic, painless, slow growing mass and their size may vary from few millimeters to several centimeters.<sup>4</sup>

## 2. CASE

A 50 year old male reported with a chief complaint of pain and swelling on gums at upper left back region of jaw since last 2-3 year and swelling was gradually increasing in size which caused bleeding and masticatory problems during chewing foods.

On clinical examination a localized gingival swelling of 2.0cm x 1.5cm which was present on left posterior region of maxillary arch and originated from interdental spaces with moderate supra and sub gingival calculus. Lesion was solitary red, exophytic and pedunculated with broad base, which was hemorrhagic with bleeding on probing the area.

Patient medical history was no contributory and I.O.P.A x-ray showed severe alveolar bone loss in affected area. On the basis of above features a provisional diagnosis of pyogenic granuloma were made.

In treatment approached, an oral prophylaxis was done. Thereafter, it was decided to further treat the lesion with a surgical approach. After local anesthesia, the enlarged localized lesion was excised up to the base of the lesion and It was ensured that lesion was completely excised by trimming up the remnants of the soft tissue adjacent to the tooth to prevent recurrence of the lesions. The excised tissue was sent for histopathological examination and showed, connective tissue was loose fibrillar and comprised of numerous proliferative capillaries with dense mixed inflammatory infiltrate. The histopathological examination confirmed diagnosis the lesion as pyogenic granuloma.

## 3. DISCUSSION

Pyogenic granuloma is predominantly occurring in second decade of life in young adult female.<sup>5</sup> According to recent study reported that peak incidence of occurrence in sixth decade of life.<sup>6</sup> In this case report, patient was male and their age 50 years.

It is more common on anterior region of maxillary arch at their facial gingival surface.<sup>3</sup> In this case lesion was found on interdental space of posterior region of maxillary arch.

Rarely pyogenic granuloma may cause significant bone loss in affected site.<sup>7</sup> but in this case it caused severe loss of alveolar bone in affected site.

Treatment of pyogenic granuloma involves a complete surgical excision of the lesion because after surgical excision recurrence has been reported in nearly 16% of cases due to incomplete excision of the lesions.<sup>8</sup> In present case post operative 6 month recurrence was not found.



Fig 1a: Pre-operative palatal view of the lesion.

Fig 1b: Pre-operative buccal view of the lesion.



Fig 2: I.O.P.A X-ray showing severe alveolar bone loss in affected area.

Fig 3: Post operative 6- months view

## 4. REFERENCES

1. Hartzell MB. Granuloma pyogenicum. J Cutan Dis Syph 1904; 22: 520-525.
2. Regezi JA, Sciubba JJ, Jordan RCK . Oral pathology: clinical pathologic considerations. 4<sup>th</sup> ed, WB Saunders, 2003; Philadelphia,115-16.
3. Neville BW, Damm DD, Allen CM etal (2002) Oral and maxiofacial pathology.2<sup>nd</sup> ed.

4. Pushendra Kumar Verma, Ruchi Srivastava, H.C. Baranwal et al. Pyogenic Granuloma - Hyperplastic Lesion of the Gingiva: Case Reports. *The Open Dentistry Journal*, 2012, 6, 153-156.
5. Ningappa Chinnannavar Sangamesh, Bellguppa Poornima, Kodige Chandrashekar Vidya et al. Extralingival pyogenic granuloma: A rare case report. *Journal of the Scientific Society* 2013; 40(1):49-51.
6. Epivatianos A, Antoniadis D, Zaraboukas T, et al. Pyogenic granuloma of the oral cavity: comparative study of its clinicopathological and immunohistochemical features. *Pathol Int* 2005; 55: 391-7.
7. Goodman-Topper ED, Bimstein E. Pyogenic granuloma as a cause of bone loss in a twelve-year-old child: report of case. *ASDC J Dent Child* 1994; 61: 65-67.
8. Jafarzadeh H, Sanatkhan M, Mohtasham N. Oral pyogenic granuloma: a review. *J Oral Sci* 2006; 48(4): 167-75.

Conflict of Interest: None

Source of Funding Nil