

# A RARE CASE OF UNI-LATERAL GINGIVAL ENLARGEMENT

## A CASE REPORT

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### INTRODUCTION

A common feature of gingival disease is its enlargement or growth. The many types of gingival enlargement can be classified according to etiological factors and resultant pathological changes. The term gingival hypertrophy was used in the past. Hypertrophy is in fact increase in size of tissue or organ because of increase in size of individual cells, as need based response of the body. In case of gingival disease the enlargement is not primarily the result of increase in size of components cells and also does not generally occur in response to an increased functional requirement.

Gingival enlargement or growth can be classified as under:-

1. Inflammatory:-
  - Acute
  - Chronic
2. Drug induced enlargement
  - Dilantic Sodium used as anti convulsant in epilepsy
  - Calcium channel blockers in hypertension
3. Idiopathic gingival enlargement
4. Associated with systemic diseases
5. Neoplastic enlargements.
6. Harmonal enlargements i.e.,
  - Puberty
  - Pregnancy
  - Menu pause
7. Hereditary enlargement

All these types of gingival enlargement affect either the total gingival tissue or along set of teeth or a single tooth in response to presence of dental plague, or some local mechanical irritant in

relation to a single tooth, or altered body response in presence of local etiological factors.

In my 30 years of experience as a periodontist, I could come across this particular type of case only once and was not able to logically categorize this type of enlargement in the pattern of classification. Therefore, the wiser comment and critical response of the readers, particularly research oriented will be healthy and positive for my personal knowledge and others, if at all with my confusion regarding the growth category.

### CASE REPORT

A seventeen years girl belonging to a village near Jammu attended the clinic along with her parents, with the complaint that she cannot chew her food and the face is deformed on right side and also there is difficulty in clear speech. In fact parents wanted the girl to get married but were worried about her swollen right cheek and visible bulging gingival while talking. The patient was matric passed, intelligent and gave a clear history about the disease as under.

Right from the age of 11-12 years she started noticing gingival inflammation and bleeding on right side. She was using (Datoon) wood stick for teeth cleansing, a common feature in the villages around Jammu and even in Jammu city it self. The commonly used tree is called 'Flaa'. She was regular user of Datoon and as per her version, she would clean all teeth.

After about 2 years time the enlargement was quite significant and she sought local treatment, which included Alum + Salt in water for gorgling. A dentist cleaned her teeth also but could not properly do it on the right side.

With in 4-5 years, the enlargement was so enormous that the teeth got covered with it completely and were not even visible, both

mandibular as well as maxillary. Lot of traditional local treatment were used. The girl felt tense and depressed.

#### ON INTRA ORAL EXAMINATION:-

There was a bulky enlargement of gingival on right side both in maxilla and mandible, teeth were invisible. Maxillary 1<sup>st</sup> and 2<sup>nd</sup> premolars on right side were tilted distally, First molar was absent. Fig 1, Fig2.



Surprisingly the periodontal health in relation to left side both in maxilla and mandible was significantly normal. Teeth were white and clean (Fig 3).



Enlarged tissue on right side was fibrous, did not bleed or pained on palpation, patient could not approximate her left teeth because premature meeting of bulky gingiva on right side. She did not give history of any other physical ailment. She had normal healthy built, excepting that she looked depressed because of her facial appearance, tense

facial expression was very much evident Fig 4.



She was not taking any medicine particularly dilantin Sodium. The enlargement could not be designated as Juvenile, because left side was almost healthy, no involvement of first molars maxillary and mandibular. Puberty (Hormonal) enlargement also recedes with growing age and does not occur unilaterally to this much extent. As I was undecided about categorization regarding classification of growth therefore, I started with investigation.

1. Intra oral radiographs were taken for maxillary premolars and molars, mandibular premolars and molars on right side and maxillary premolars and molars and mandibular premolar and molars on left side.
2. Blood tests for TLC, DLC, HB, Serum Phosphatase were done.

Radiographs revealed enormous bone loss in molar and premolar regions both in mandible and maxilla on right side. It looked horizontal pattern, ultimately affecting total interdental bone. On examining the radiographs under magnifying lense it was observed that some where palatal or buccal plate radio-opacity was present. the X-rays of left side were almost normal. The Blood tests were also under normal range. The patient was got examined by a medical doctor, who diagnosed her as a healthy person without any organic disease.

Ultimately the excision of the growth was planned and fate of the teeth to be decided after removal of soft tissue.

All aspects regarding surgery and post surgery were explained to the parents and written consent

to photograph the patient was taken.

The patient was put on antibiotics one day prior to surgery. The next morning gingivectomy of maxillary area was carried out under local anaesthesia. Thorough curettage of whole area was done after excision of main tissue fold Fig. 5. It was found that despite heavy bone loss, teeth had some stability and could be given a chance of healing, because some strands of alveolar bone seemed present around the teeth, some where of palatal and some where of buccal plate. The wound was packed with Co-pack and patient advised to continue antibiotic and inflammatory tablets for one week. Patient was already motivated for 3 time brushing a day with soft brush, which she was maticulously following on left side. She was also advised chlorhexadine mouth wash twice daily.



After ten days pack was removed, it was observed that teeth gained some stability. The same surgical procedure was repeated for mandibular growth after 2 weeks time with same drugs Fig 6.



Patient was reexamined after one month duration, surprisingly the teeth were less mobile and reattachment had taken place at various levels of roots of different teeth.

Overall the girl looked normal and was brushing and using tooth picks on right side also. Emotionally she looked happy Fig.7

The patient was kept under observation for



one year for monthly check ups. The gingival reattachment was observed and the mobility was reduced to 50%. Patient was using right side also for eating Fig. 8.



The left side was found improved with optimum periodontal health Fig 9. after 3 months

Fig 10 after 6 months.

Fig 11 after 12 months.





**HISTOPATHOLOGY**

The excised tissue was sent for histopathological examination. It revealed hyperplasia of connective tissue and epithelium, elongated retepegs and acanthosis of epithelium. Retepegs extended deep into connective tissue.

There were densely arranged collagen fibres bundles. Increase in fibroblasts and new capillaries, inter cellular spaces were widened with cytoplasmic oedema. The presence of granulation tissue with young capillaries and fibroblasts and irregular collagen fibrils with occasional lymphocytes sent indication towards recurrent enlargement.

**DISCUSSION**

The growth in the patient is of rare type, not fitting in the category of juvenile periodontitis,

which is more likely to exist in this age having been persisted from childhood.

It also does not look like of puberty pattern because such type of periodontitis recede with growing age and also does not remain unilateral up to the extent present in this particular patient.

Therefore the case is submitted for publishing for the sake of obtaining more experienced and expert comment especially from readers involved in Research and exhaustive clinical-work

**RADIOGRAPHIC DISCRPTION OF X RAYS**

Figure 1 shows heavy bone loss in relation to right upper premolars and 2<sup>nd</sup> molar. 1<sup>st</sup> molar is absent 2<sup>nd</sup> premolar tilted distally. Horizontal pattern of bone loss is observed. Close observation under magnifying lense reveals some stands of cortical plate- strands.

Figure 2 heavy bone loss distal to right upper canine tooth. 50% bone loss between upper central and lateral incisors (Horizontal).

Figure 3 heavy bone loss mesial to mandibular canine and with 1<sup>st</sup> and 2<sup>nd</sup> premolar. Vertical bone defect between second premolar and 1<sup>st</sup> molar on right side.

Figure 4 15 to 20% crestal bone loss in relation to premolars and molars of left side of mandible.

Figure 5 15 to 20 % bone loss in maxillary 1<sup>st</sup> and 2<sup>nd</sup> premolar and 1<sup>st</sup> and 2<sup>nd</sup> molar on the left side.

