The Oral Findings of the Gigantic Patient with Gingival Enlargement-(a Case)*

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Abstract

This syndrome results from a chronic exposure to GH (Growth Hormone) leading to the classic clinical features that the diagnosis seems to be easy. The early diagnosis and intervention may prevent irreversible changes associated with chronic overproduction of GH (as well IGF-1) and may also normalise life expectancy. These patients have an increased mortality rate from systemic sequela of hypersomatotrophism in 2-4 times that of the healthy population. The facial scene changes are generally coarsening of features prognathism and diastema (widely spaced teeth). In this case report it is aimed to represent the periodontal surgery findings of a 24 years old male gigantism patient suffering from gingival enlargement in the site of 11 and 12 teeth who applied to Dicle University Faculty of Dentistry Department of Periodontology. After oral hygiene instruction, initial periodontal treatment was performed and after these the patient was operated. The patients periodic follow ups are still lasting by three months intervals. (*Journal of International Dental and Medical Research 2009; 2: (1), pp. 16-18)*

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Introduction

Gigantism is characterized by excessive height and body proportions; acromegaly is characterized by the disproportional enlargement of acral parts, hands, and feet and the coarsening of facial features, with enlargement of supraorbital ridges, nose, ears and chin, thick lips and exaggerated nasolabial folds. Although, there is no clear demarcation between a tall normal person and a pituitary giant, a height in excess of 225 cm (7 feet 4 inches) is considered to be in the gigantic range and almost invariably is due to excessive growth hormone (GH) secretion.

In growing children, however, the possibility of gigantism should be considered when the height exceeds 3 or 4 standard deviation(1). Frequency of Gigantism is a rare disorder and probably no more than 100 patients have been reported (2). More than 15 patients have been reported since 1989, when one counts patient reports (3-14) and patients included in group studies. Thus, it may be more frequent than previously thought.

The most characteristic manifestations are increase in height and growth velocity and the enlargement of the acral parts of the body. The acral enlargement is due to an increase in soft tissue as well as to periosteal bone growth.

Coarsening or thickening of the facial features, increased supraorbital ridges, and prognathism ocur sooner or later in all giants. The hands and feet attain extraordinary size. Enlargement of the viscera may be evident on physical examination. The patients may perspire profusely and have oily skin. Kyphosis, subluxations, joint deformities, and arthropathy are frequent problems.

Arthralgia is a common complaint of patients with gigantism and acromegaly; it may involve the spine in addition to peripheral joints and may lead to irreversible cartilage degeneration. There is synovial and periarticular swelling.

CASE REPORT

In this case a 24 years old gigantic male patients applied to Periodontology Department of Dentistry Faculty of Dicle University with gingival swelling on maxillary anterior region which was causing speaking, eating and aesthetic problems.

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By the anamnesys it was recorded that the patient was 242 cm (7 feet, 11 inches) tall, 155 kg in weight and had been medicated in Dicle University Faculty of Medicine Department of Endocrinology.

We interviewed his physician by the regard of the record of his treatment with injectable octreotide (sandostatin lar®) and normal growth hormon levels which were controlled regularly. Intraoral examination was determined an epulis in the site of 11 and 12 teeth (Fig. 1, 2).

Fig. 1 Intra-oral scene.

Fig. 2 Radiographic scene.

Initial periodontal treatment was begun (scaling, root planing). Chlorhexidine rinse was recommended twice daily and the patient was instructed how to maintain proper oral hygiene. At the end of the treatment, gingival inflammation was decreased. In this way, enlargement decreased.

Remaining of gingival enlargement was removed with gingivectomy (Fig. 3). The patient has a follow up two month later (Fig. 4).

Fig. 3 Post- Operative Intra-oral scene.

Discussion

Epulis is a generic term used clinically to designate all discrete tumors and tumorlike masses of the gingiva. It serves to locate the tumor but not to describe it. Most lesions referred to as epulis are inflammatory rather than neoplastic. İt is possibly originates as a response of tissues to minor trauma and/or chronic irritation, thus opening a pathway for invasion of non-specific microorganisms, although microorganisms are seldom demonstrated within these lesions.

They are more common in the maxillary anterior region. Gingival irritation and inflammations that result from poor oral hygiene, dental plaque, calculus and diastema or over-hanging restorations may be precipitating factors in many cases (15). Also may be caused by hormonal changes (16).

Fig. 4 The patient was 242 cm (7 feet, 11 inches) tall.

Conclusions

We diagnosed that this case was caused by food impaction associated with diastema and poor oral hygiene, not from excessive growth hormon release. It is marginal, interdental and caracterized by prominent bulbous interproximale papillae.

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