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Case Report

IDIOPATHIC GINGIVAL ENLARGEMENT: A RARE CASE

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ABSTRACT

Idiopathic gingival enlargement is a rare entity characterised by enlargement of all the 3 parts of gingival with no obvious causative factors. In this report we present you a case of idiopathic enlargement without any specific association to any causative factors.

INTRODUCTION

Idiopathic gingival enlargement is a rare condition affecting the gingiva which has no definitive cause and is usually benign, asymptomatic, nonhemorrhagic and nonexudative proliferative lesion. [1][2]. It frequently presents itself as a generalized and irregular enlargement of the attached and marginalgingiva both in the facial and lingual aspects [3] [4]. A few genetic disorders or some drugs (immunosuppressants, anticonvulsants, and calciumchannel blockers) can lead to gingivalenlargement.[5] However, numerous nonfamilial examples of thiscondition are recognized and classified as idiopathic.

Other terms used to describe this condtiton are elephantiasis, idiopathic fibromatosis, gingivomatosis, and hereditary gingival fibromatosis [6]. It has a similar predilection in males and females. The most common effect related to gingival enlargement is malpositioning of teeth, diastemas, and prolonged retention of primary teeth. In cases of massive enlargement the teeth are completely submerged, and the enlargement projects into the oral vestibule resulting in facial disfigurement, difficulty in mastication, and speech . [7] [8] . Its cause is undetermined hence the term idiopathic, which usually develops at the time of eruption of permanent teeth. It usually occurs alone or as a part of syndrome which can be a autosomal dominant or recessive syndrome. [9] [10]

This case report highlights a nonsyndromic case of severe generalized idiopathic gingival enlargement

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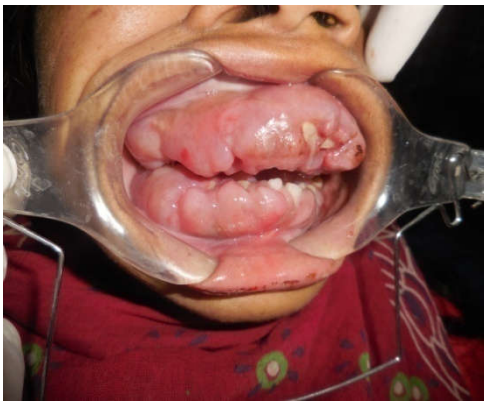
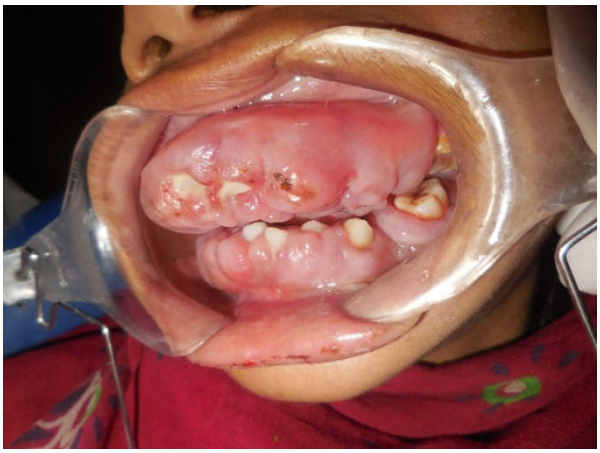
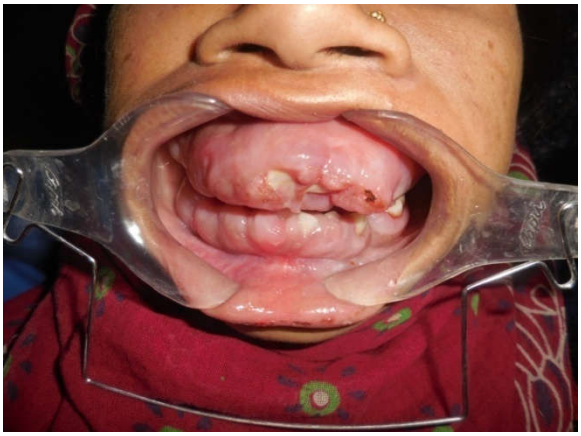
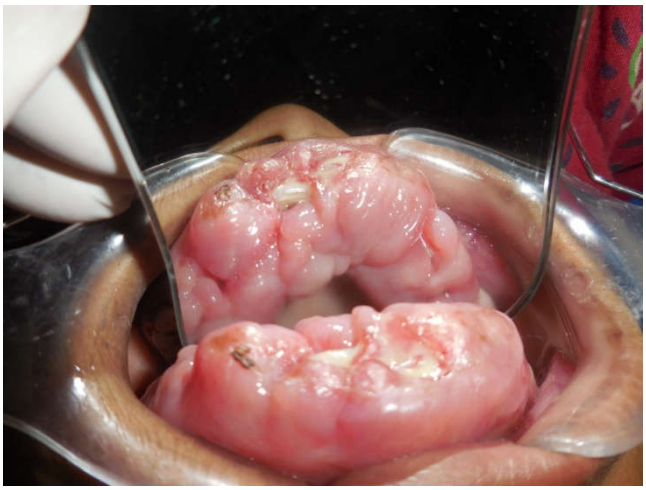
CASE REPORT

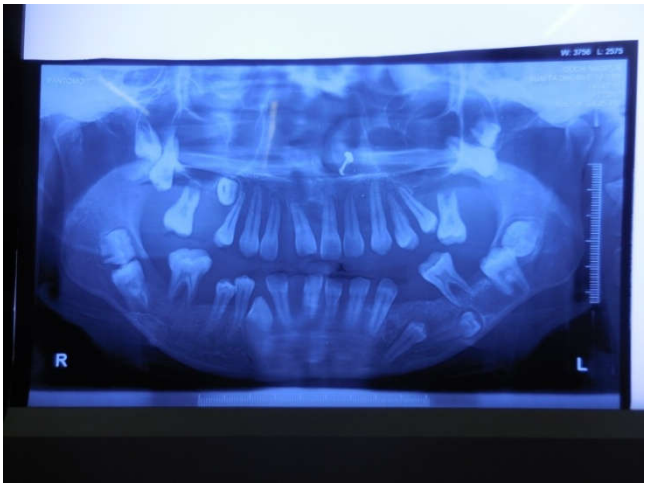
A 17yearold female patient reported to the Department of Periodontics in Government Dental College Nagpur with a chief complaint of enlarged gums in upper and lower arches. The enlargement was progressive in nature which caused difficulties in speech, mastication, and complete closure of lips, thereby leading to esthetic impairment. There was no associated medical history of epilepsy or any type of physical or mental disorder and general health of patient was good without any recent weight loss reported. Patient hadn't been on any medication before. None of her family members suffered from a similar condition. No symptoms of painwere present. The patient revealed that she had first noticed the swelling post eruption of her permanent teeth. The swelling slowly progressed and involved the gingiva in both the arches and attained the present size.

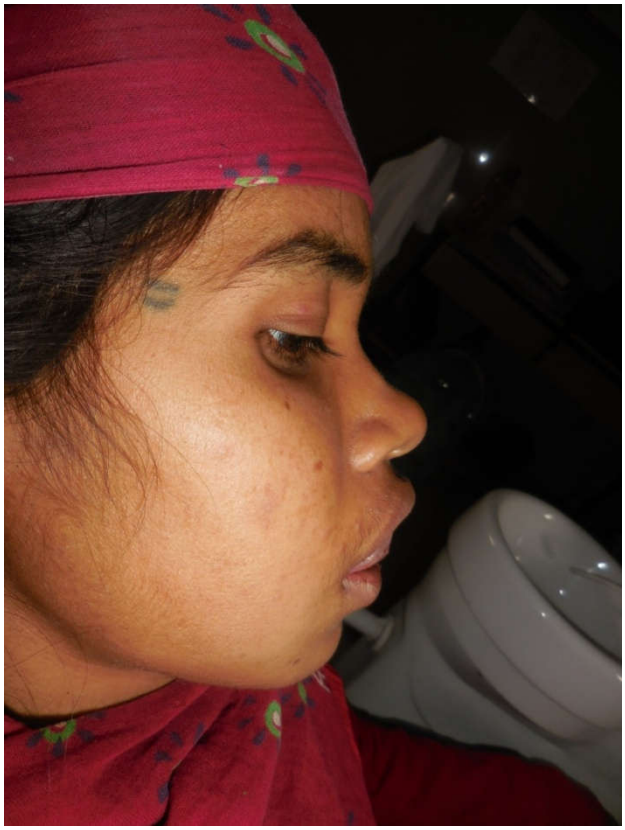


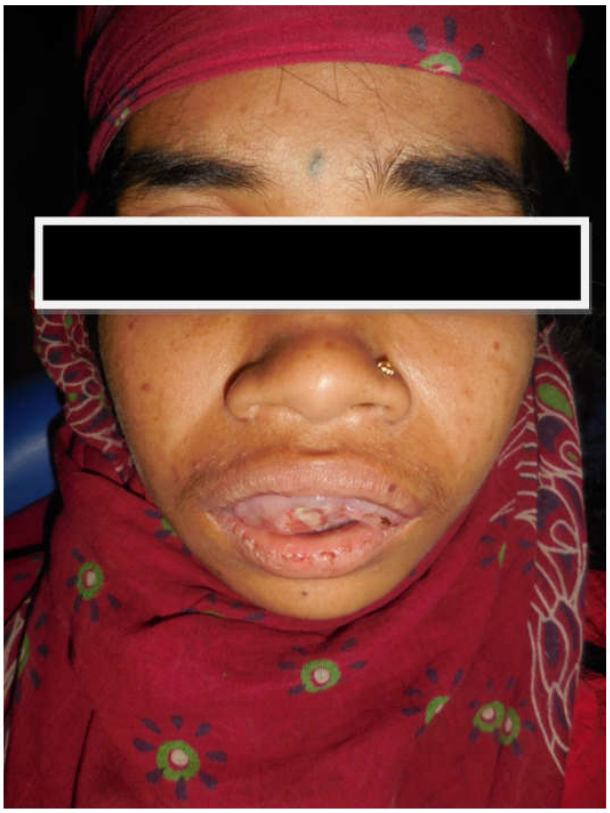












On examination, the patient had incompetent everted lips and a convex profile. Intraoral examination revealed poor oral hyegine and generalized severe gingival overgrowth involving both the maxillary and mandibular arches. It was a grade III (bokenhemp) as the enlargedgingiva totally or partially covered the crowns of permanent teeth with only the incisal and occlusal surfaces visible. The gingiva was pink in colour with firm, dense, and fibrous consistency. No bleeding and suppuration was noticed. Pseudopockets ranging from 7 mm to

10 mm were observed which had slight bleeding tendency. No tooth mobility was noticed. Malpositioning of teeth was noted. Orthopantomogram revealed no bone loss and a normal eruption of maxillary and mandibular central incisors lateral incisiors canines first premolars, mandibular right second premolar and first molars whereas second premolars in all other quadrants were impacted. 2^{nd}& 3^{rd} molarsof upper & lower arch were also impacted.

Hematological investigations were within normal limits.

DISCUSSION

Idiopathic gingival enlargement may be congenital or hereditary condition and may be aggravated by local factors. Gorlin and Cohen described the inheritance as autosomal dominant whereas later Singer and Goldblatt reported an autosomal recessive pattern of inheritance. In the present case, family history was negative and no other identifiable cause could be found out. . [9] [11]

HGF mostly occurs as an isolated entity, but in some cases, it occurs as a manifestation of a syndrome such as Zimmermann-Laband syndrome which is characterised by ear, nose, bone and nail defects with hepatosplenomegaly or Rutherfurd syndrome displaying corneal dystrophy, mental retardation, impairment of dental eruption by radicular resorption in addition to gingival enlargementor Cross syndrome which is an autosomal recessive disorder characterized by gingival fibromatosis, microphthalmia, mental retardation, athetosis, and hypopigmentation or Ramon syndrome, an autosomal recessive disease, was originally characterized by gingival fibromatosis, cherubism, hypertrichosis, mental deficiency, epilepsy and stunted growth . Reports have even shown the association of hypothyroidism with gingival fibromatosis.[12] [13]We also tried to associate the present case with any syndrome as the patient had depressed nasal bridge, sparsed eyebrows but the association was insignificant but the patient's weight, height, and psychomotor development were considered to be within normal limits for her age. Hence, the case was diagnosed as a non syndromiccase of idiopathic gingival fibromatosis.

A dental practitioner should suspect a chance of malignancy in such patients in a gingival enlargement case. Gingival hyperplasia is sometimes the initial sign of leukemia.. Gingival hyperplasia is commonly seen with the AML subtypes: Acute monocytic leukemia (M5) (66.7%), acute myelomonocytic leukemia (M4) (18.5%), and acutemyelocytic leukemia (M1, M2) (3.7%). The gingiva Leukemic gingival enlargements occur in AML because gingival tissue supports continuous trafficking of myeloid cells and contains specialized post‐capillary venules for egress of these cells into the tissues at the sites of gingivitis or periodontitis.[In the present case the hematological reports showed no abnormality in blood counts or bleeding and clotting times hence leukemia was ruled out.[14]

Based on the clinical findings, previous medical history, family history all of which were non contributory a diagnosis of idiopathic gingival enlargement was made in this case. The ortho pantomogram suggests that enlargement must have started when the patient was 11-12 years of age

CONCLUSION

The etiopathogenesis of Idiopathic gingival enlargement is up till now to be unwavering. The above report futhur highlights the need for more research focusing on the etiology of such cases.

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