



Case Report

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Surgical management of supplemental tooth

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Abstract

Supernumerary teeth may be associated with a syndrome or even in non syndromic condition. Etiology of development of supernumerary teeth is not clear. It usually results in oral problems like poor esthetics, malocclusion, crowding and food impaction. This article highlights the surgical management of supernumerary teeth, which were asymptomatic and fully erupted in the oral cavity which caused difficulty and discomfort of speech and crowding in his lower jaw. The case was managed by the joint effort of dentist and oral surgeon. The Patient was willing for the removal of the teeth, though orthodontic management of such teeth could be one priority. The patient was happy after the treatment. *Key Messages:* The aim of this report was to document a case of non-familial occurrence of multiple supernumerary teeth occurring as an isolated non syndromic trait and to discuss the treatment modalities. Our case report described the clinical features, the type of treatment provided to a patient with non syndromic multiple hyperdontia.

Keywords: Supernumerary teeth, Crowding, Non-Syndromic Condition.

INTRODUCTION

In the maxilla, the mandible or both supernumerary teeth can occur as single, multiple, unilaterally or bilaterally^[1]. Mostly affected population is male as compared to females^[2]. 7% of relative occurrence supernumerary teeth are having normal clinical and radiographic appearance^[2]. Supernumerary teeth are more frequently observed in permanent dentition than in deciduous dentition with a predilection for the upper arch than lower arch in a proportion of 10:1^[1]. Multiple supernumerary teeth are rare in individuals with no other associated diseases or syndromes^[2]. Multiple supernumerary teeth are usually associated with conditions such as cleft lip and palate or syndromes like cleidocranial dysplasia and Gardner's syndrome. In the present study we have reported regarding management of multiple supernumerary teeth present in lower jaw which is rare in occurrence as stated in earlier literature^[1, 2].

Supernumerary teeth are common and present with various complications. Aesthetic, Crowding, caries, spacing, malposition of adjacent teeth due to lack of space in the arch is one of the complications associated with erupted supplemental teeth thus it is of great concern to dentist and the patients^[3]. In the present case patient was unhappy and had discomfort in speech caused due supernumerary teeth. There is no exact treatment protocol for the treatment of supernumerary teeth. Treatment plan in the present case reported is usually extraction or orthodontic treatment, which usually involves a surgical procedure^[4]. Thus the case report is mainly aimed to focus regarding early recognition and management of supernumerary teeth to prevent various complications as reported in literature^[3]. In the present case prevention of root resorption of permanent teeth is achieved by management of supernumerary teeth.

CASE REPORT

A 30 year old male patient reported to A.B.Shetty dental college in February 2016, with complain of difficulty in brushing and speech due to crowding in his lower arch. The Patient was happy with his aesthetics. On general physical and mental examination patient was physically fit and reported no medical history. On oral examination patient presented with a good oral hygiene, with no occlusal discrepancy

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(Fig- 4), but in the lower arch he presented with two completely erupted supernumerary teeth appearing like normal premolars bilaterally present between the premolars (Fig- 2). On intra oral examination lower arch showed crowding (Fig -2) Extra oral examination did not show any facial asymmetry or discrepancy (Fig-1). With the above features, the diagnosis of non syndromic multiple supernumerary teeth were made. The tooth was asymptomatic, but patient reported of discomfort due to severe crowding. Hence he was advised for orthodontic treatment but patient was not willing hence surgical removal of the teeth was best treatment option because retention of supernumerary teeth in this case would lead to increased tooth size arch length discrepancy, prevent resorption of adjacent

tooth root, and other problems inherent to supernumerary teeth. Literature states that for definitive diagnosis radiographs played an important role to rule out the presence of impacted supernumerary teeth or other associated anomalies and approximation with adjacent anatomic structures during surgical extraction.^[4] In the present case as shown in the (Fig -3) the teeth are completely erupted in the oral cavity hence to prevent unnecessary radiation exposure extraction was advised without pre-operative radiographs and patient was advised to be on follow up post operatively. The Patient was willing for the treatment and underwent single sitting extraction of both the supplemental tooth (Fig- 5) under local anesthesia in our college. The procedure and healing were uneventful.



Figure 1: Extra oral photograph

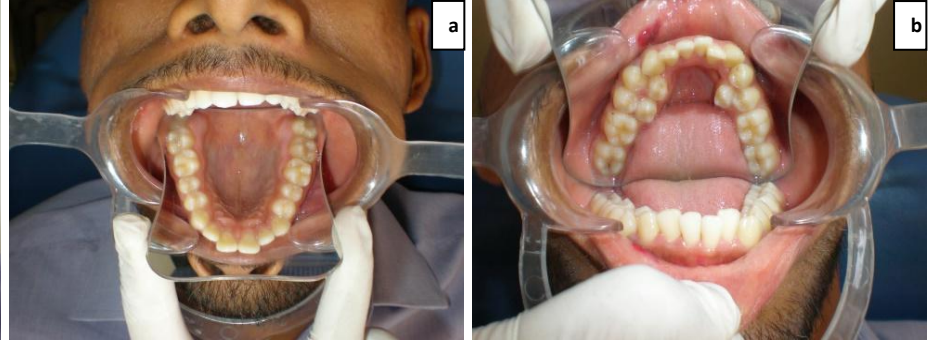


Figure 2: a, b- Intra Oral Photographs

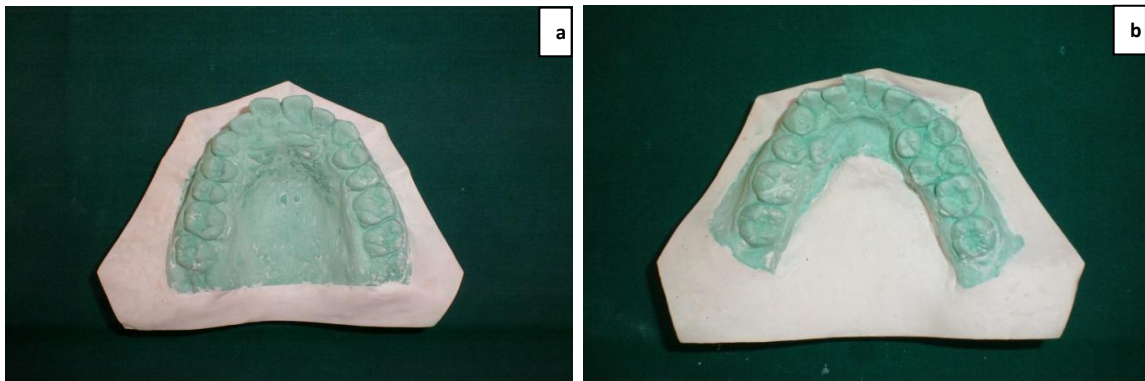


Figure 3: a, b- Pre Treatment Intra Oral Photographs of Model



Figure 4: a, b, c- Intraoral Photographs of occlusion of the patient

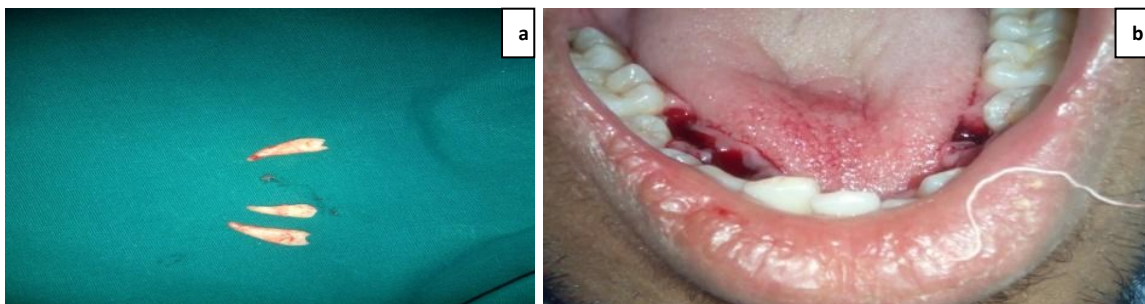


Figure 5: a, b- Intraoral Photographs of occlusion of the patient

DISCUSSION

In our daily practice, rarely we get to see that the teeth present surpass the normal dental formula, regardless of their morphology and location.^[5] The Literature states that Anno Domini was the first to discover and report supernumerary teeth.^[6] The Unknown etiology for occurrence, but scientific evidence also states a number of theories which have been proposed: Atavism, tooth germ dichotomy, genetic factors, and hyperactivity of dental lamina.^[7] Cleft lip and palate, Gardner's syndrome, cleidocranial dysostosis etc are few pathological conditions where multiple supernumerary teeth are present.^[8]

The Prevalence rate of supernumerary teeth among population is 9:2 when compared to male female ratio as reported by Yusuf.^[8] Supernumerary teeth may erupt normally, stay impacted, appear inverted or assume an ectopic position or an abnormal path of eruption.^[9]

Their development might precipitate a variety of complications such as crowding, delayed eruption, diastema development, cystic lesions and resorption of adjacent teeth.^[10] Therefore, proper evaluation, early diagnosis and appropriate treatment are essential. Supernumerary teeth may closely resemble the teeth of the group to which it belongs, i.e. molars, premolars, or the anterior teeth. Supplementary teeth are the supernumerary teeth, which bear resemblance to the tooth with which it is associated.^[11]

Vital anatomical structure and type or position of the supernumerary teeth need to be evaluated before deciding the treatment plan, and radiographs are the most reliable and definitive method for diagnosis of supernumerary teeth.^[12]

CONCLUSION

Multiple supernumerary teeth, which are symptomatic may have to be surgically removed after appropriate education of the patient. However, asymptomatic supernumerary teeth may be left in place and immediate removal indicated only if any of the aforementioned complications are evident.

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