

An Unusual Case of All Impacted Mandibular Anterior Teeth

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ABSTRACT

Multiple impacted teeth by itself is a rare condition and often found in association with syndromes. A rare case of multiple impacted mandibular anterior teeth in which no syndrome or systemic conditions are associated is being reported.

Keywords: Impacted teeth, Incisor, Tooth extraction.

INTRODUCTION

Impaction is defined as a cessation of the eruption of a tooth caused by a clinically or radiographically detectable physical barrier in the eruption path or by an ectopic position of the tooth¹. Impaction of teeth is a common event that most frequently affects the mandibular third molars and maxillary cuspids. Less commonly premolars, mandibular cuspids and second molars are involved. It is rare to see impaction of incisors and first molars². Impaction of teeth can result firstly from local biomechanical impediments and secondarily from childhood maxillofacial or dentoalveolar trauma, malpositioning of an adjacent tooth, thickened overlying osseous or mucosal tissues, insufficient maxillofacial skeletal development or a low correlation between maxillofacial skeletal development and tooth maturation, eruption disturbances and owing to direct or indirect effects of cysts or neoplasms³. A host of systemic prenatal and post natal disorders, diseases and

syndromes can also cause tooth impaction^{4,5} (Table 1). Therefore it is mandatory to perform a thorough clinical and radiological examination when teeth do not appear according to the usual eruption schedule.

Table 1: Syndromes associated with tooth impaction^{4,5}.

Gardeners syndrome	Osteoglyphonic dysplasia
Cleidocranial dysplasia	Noonan's syndrome
Zimmerman- laband syndrome	Aarskog syndrome
Down syndrome	GAPO syndrome
Osteopathia striata	Osteoporosis
Progeria Syndrome	Singleton- Merten
Nonhereditary pathoses such as endocrine disorders	Mucopolysaccharidoses
Yunis- Varon syndrome	

The aim of this report is to describe a case of multiple impacted lower anterior teeth in which no syndrome or systemic condition have been detected.



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CASE REPORT

A 38 year old male presented with chief complaint of pain and slight swelling in the mandibular anterior region since 1 month. According to the patient's history lower anterior teeth were not erupted after deciduous teeth exfoliated at the age of 3 years due to trauma. Patient did not seek any treatment after trauma.

INTRA ORAL EXAMINATION

Intraoral examination revealed that all the teeth were fully erupted in the maxilla and mandible except the mandibular anterior teeth (31, 32, 33, 41, 42, 43) which were unerupted (Figure 1). The oral soft tissues including gingiva were unremarkable. On radiological examination, orthopantomogram showed all impacted lower anterior teeth (Figure 2).

A thorough general examination was carried out to exclude any associated congenital abnormalities. There had been no birth complications and no relevant maternal history. Physical examination revealed that the patient was 1.66m tall and weighed 72 kg. The head, eyes, ears, nose, throat, trunk and extremities did not show any abnormality. Radiologically, clavicles, vertebral skeleton, chest, skull, hands and feet were normal. Results of routine hematology tests were within normal limits. There was no significant medical or dental history of the patient's family.



Fig 2: OPG Showing Impacted 31, 32, 33, 41, 42, 43.

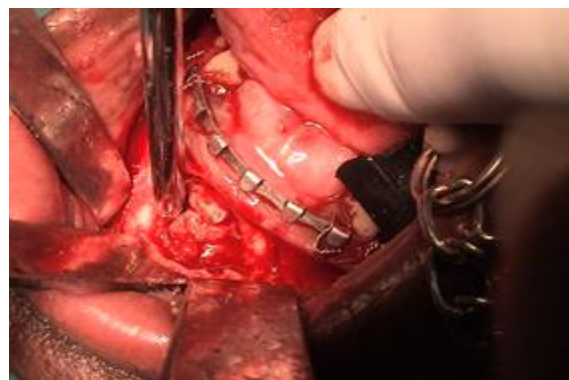


Fig 3: Surgically Exposed Impacted 31, 32, 33, 41, 42, 43.



Fig 4: Surgically Removed 31, 32, 33, 41, 42, 43.



Fig 1: Clinical Picture Showing Unerupted Lower Anterior Teeth.

SURGERY

It was planned to remove all impacted mandibular anterior teeth. Under general anesthesia upper and lower arch bars were fixed to teeth in anticipation of fracture of mandible. Incision was made in the labial sulcus 5mm below the gingival margin and a mucoperiosteal flap was raised, bone guttering was done around the

impacted teeth and they were removed with elevation. Canines were removed with tooth sectioning (Figures 3 & 4). Sockets were thoroughly irrigated with betadine, haemostasis was achieved and wound was closed with resorbable sutures. The post-operative recovery and healing were uneventful. Arch bars were removed 2 weeks postoperatively.

DISCUSSION

Impaction of teeth is a common event that most frequently affects the mandibular third molars and maxillary cuspids. Less commonly, premolars, mandibular cuspids, and second molars are involved. It is rare to see impaction of incisors and first molars². Multiple impacted teeth by itself is a rare condition and often found in association with syndromes. The overall frequency of permanent incisor retention or impaction in adults has been reported to range from 0.1 % to 0.5%^{6,7}. The frequency of maxillary incisor impaction has been found to range from 0.006% to 0.2% and for mandibular impaction a frequency of 0.01% has been reported^{1,7}. Impaction of permanent mandibular canine is rare with frequencies reported from 0.05% to 0.04%^{1,6,8}. Very early loss of primary incisors due to trauma usually leads to retardation in the eruption and in rare cases to impaction⁹. The effect of trauma to the primary incisors on its final position and alignment of the permanent incisors has been sparsely reported¹⁰.

Only a few cases of non- syndromic multiple impacted teeth were reported^{11, 12}. In this case the overlying soft tissue was normal. The clinical and radiological examination revealed relatively normal jaws and teeth. Non eruption of the teeth was probably caused by childhood trauma and early loss of all primary teeth.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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