JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH

How to cite this article:

RANGEETH B N, JOYSON M, SANGEETHA D. MULTIPLE SUPERNUMERARY TEETH ASSOCIATED WITH MISSING LATERAL INCISOR IN A PATIENT WHO WAS TREATED FOR CLEFT LIP AND PALATE: A CASE REPORT. Journal of Clinical and Diagnostic Research [serial online] 2010 December [cited: 2010 December 10]; 4;3604-3606

Available from
http://www.jcdr.in/article_fulltext.asp?issn=0973-709x&year=2010&volume=4&issue=6&page=3604-3606&issn=0973-709x&id=822

CASE REPORT

Multiple Supernumerary Teeth Associated With Missing Lateral Incisor In A Patient Who Was Treated For Cleft Lip And Palate: A Case Report

RANGEETH B N*, JOYSON MOSES, SANGEETHA DURAIVELU**

ABSTRACT

Multiple supernumerary teeth are usually associated with syndromes and non-syndromic ones are rare. Anomalies in the dentition are usually seen in patients with cleft lip and palate, and literature reports on a combination of the anomalies are rare. This rare case report aims to highlight the association of unerupted supernumerary teeth which were associated with a missing lateral incisor in a patient who had undergone surgical correction for cleft lip and palate during the first and second years after birth.

Key words: cleft palate, hypodontia, supernumerary teeth, impaction

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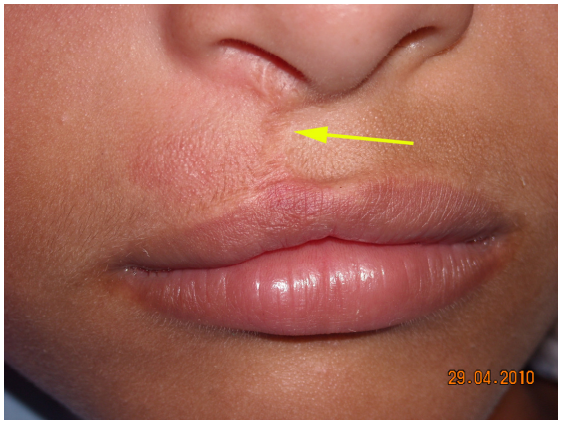
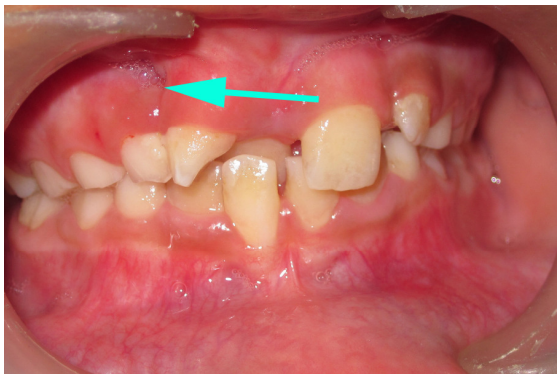
This case report describes a rare coexistence of congenitally missing maxillary lateral incisors in the presence of multiple supernumerary teeth in the maxillary region, especially in a patient who was treated for non- syndromic cleft lip and palate. The aetiology has been associated with heredity [1]. More recently, it has been suggested that many molecular signaling pathways including Paracrine signal molecules Hedgehog, Fibroblast growth factor (FGF), Wnt, Tumour Necrosis Factor (TNF) and Bone Morphogenic Proteins (BMP) families which are known to be involved in the normal development of the tooth germ, can also give rise to additional teeth if they are inappropriately regulated. [2].

A 10 year old male child, who had undergone corrective surgeries for orofacial cleft, had come to the outpatient's department with the chief complaint of irregularities in the teeth. An extra oral examination revealed the evidence of a scar on the upper lip, a result of the correction of cleft lip [Table/Fig 1].



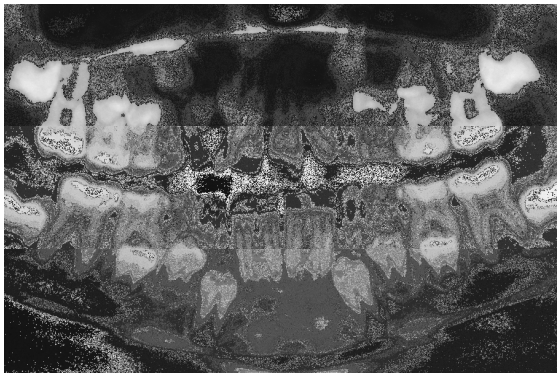
[Table/Fig 1]: Extra oral view showing evidence of scar as a result of cleft correction in the upper lip towards the right side of the patient

Intra oral examination revealed a cross bite of the right maxillary central incisor and the missing lateral, with a retained right maxillary primary central incisor in the region [Table/Fig 2].

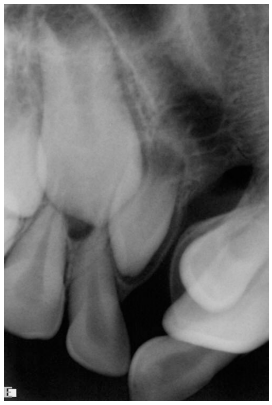


[Table/Fig 2]: Cross bite in relation to upper right central incisor with the retained deciduous counterpart and missing lateral incisor, arrow shows the region where the cleft correction was done.

A panoramic radiograph revealing two impacted supernumerary teeth in the region of the missing right maxillary lateral incisor [Table/Fig 3] and an intraoral radiograph revealing a more exact position were advised [Table/Fig 4].

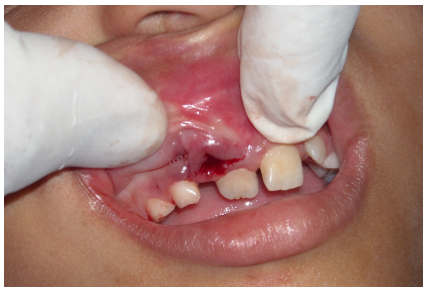


[Table/Fig 3]: Panoramic radiograph revealing the presence of multiple impacted supernumerary teeth and a missing lateral incisor in the maxillary region

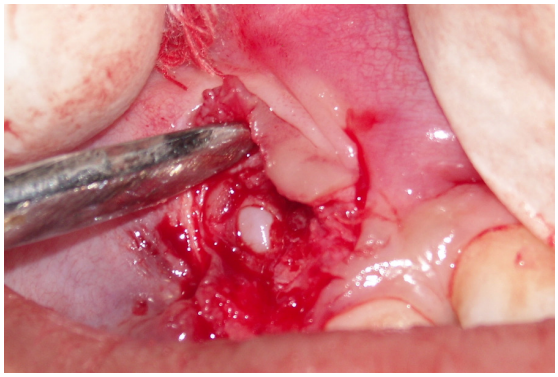


[Table/Fig 4]: Intraoral radiograph revealing the more definite position of the supernumerary teeth

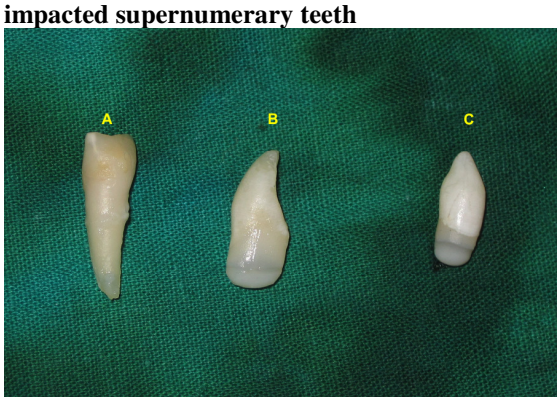
Extraction of the retained primary dentition and the surgical removal of the supernumerary teeth were carried out [Table/Fig 5], [Table/Fig 6], [Table/Fig 7]. Once the healing was established, the patient was advised a lower anterior inclined plane [Figure. 8].



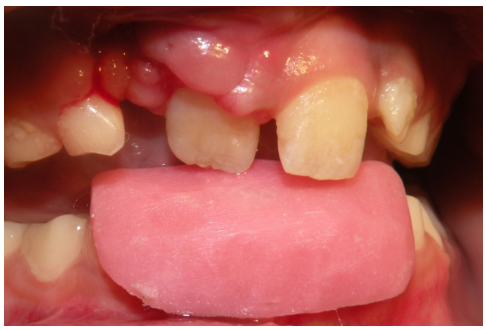
Table/fig 5 :Extraction of the retained primary dentition and the surgical removal carried out.



[Table/Fig 6]: Surgical extraction of the impacted supernumerary teeth



[Table/Fig 7]: (A) Extracted right upper primary central incisor, (B & C) surgically extracted supernumerary teeth



[Table/Fig 8]: Lower anterior inclined plane for correction of cross bite after establishment of healing

A review of the cases which were reported from 1969 to 1990 showed a predilection of non-syndrome multiple supernumerary teeth in the mandible. [3] The association with cleft lip and palate results from the fragmentation of the dental lamina during cleft formation [4] and are the second most common anomalies which are found at the cleft area. [5] The numerical anomalies, either anodontia or supernumerary teeth, are seven times more frequent in patients with orofacial cleft. [6] The congenital absence of teeth frequently involves the absence of the maxillary lateral incisor which is adjacent to the cleft area. [7,8]. Hence, this case reports the rare finding of both the congenital absence of teeth and the presence of supernumerary teeth.

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