SURGICAL MANAGEMENT OF IMPACTED AND INVERTED MAXILLARY CENTRAL INCISORS - CASE REPORT

Shandilya Ramanojam, Pallavi Rathi, Mayur Vilas Limbhore, Adil Mevawala, Vikram Singh, Rajat Bhende

Department of Oral and Maxillofacial Surgery
Bharati Vidyapeeth Dental College, Katraj, Pune, Maharashtra, India-411030

ABSTRACT

In routine dental practice impacted maxillary permanent central incisors are not so common. Impaction is developmental anomaly of the form of the tooth commonly affected the permanent incisors. Here we come with one case which was reported to the department of oral and maxillofacial surgery at Bharatividyapeeth dental hospital pune. A 32 years old lady with complains of missing teeth in maxillary anterior region. After radiographic evaluation both teeth were completely impacted with crown facing towards the nasal floor and root facing towards the alveolar bone. Surgery was performed under local anestheisa and removal of both central incisor was done without hampering the nasal floor.

KEYWORDS: Impacted Bilateral Central Incisor, Inverted Tooth, Nasal Floor.

INTRODUCTION

Maxillary central incisors are having a major role in facial aesthetics as well as functionally so impaction of these teeth hampers the aesthetics as well as functional efficacy of oral cavity. Impaction of both the maxillary central incisors are very rare condition (1). There are numerous other impaction founds in oral cavity apart from central incisors and their orders for impaction are as follows: mandibular 3rd molar, maxillary 3rd molar, maxillary cuspid, mandibular cuspid, mandibular premolar, maxillary premolar and maxillary central and lateral incisors (2). Maxillary incisors are also classified as a labially impacted incisors, palatally impacted incisors and vertically impacted incisors (3). The subdivisions under labially impacted incisors are labially inclined, labially horizontal and labially inverted. The subdivisions under impacted palatal incisors are palatally inclined and palatally horizontal (4). There are two treatment modalities for impacted maxillary central incisors that includes, if possible orthodontic correction should rule out and with surgical exposure it can be come out in stable dental arch form and if orthodontic corrections are not possible than better option is go for the surgical removal followed by prosthesis like bridge or implant placement (5-6). The objective for this case report is to explain and highlight an uncommon condition.

CASE REPORT

A 32 year old lady reported to our oral and maxillofacial surgery outpatient department with complaint of missing teeth in anterior front region of upper jaw. Intraoral examination showed that her both central incisors are missing without past history of extraction. A panoramic radiograph shows there are presence of bilateral impacted and inverted maxillary central incisors and for both the teeth their crowns are facing upwards towards the nasal floor and roots are facing downwards towards the alveolar process (Figure 1). We transfer the patient to department of orthodonics for their opinion and they come with the conclusion that surgical removal of both teeth is neccessary because orthodontically it is not possible to correct this situation. Surgery was planned under local anestheisa. Informed consent was taken from the patient regarding surgery and its complications. Crevicular incison was given and mucoperiosteal flap was raised and Surgery was done without hampering or damage to nasal floor and there was no oroantral communication (Figure 2, Figure 3). The reflected mucoperiosteal flap was closed with 3-0 ethilion.

Fig 1: Panromic Radiograph Showing Bilaterel Impaction of Maxillary Central Incisors
Treatments modalities for impacted maxillary incisors are either surgical exposure followed by orthodontic alignment in dental arch or surgical removal followed by implant or bridge. For most of the impacted maxillary incisors needs orthodontic treatment but there are so many factors that should fulfill the all the aspects that needed for orthodontic correction that includes, the position and direction of the impacted tooth, the degree of root completion, the degree of dilaceration, and the presence of space for the impacted tooth (7-12).

DISCUSSION

Maxillary incisors are playing major role in facial aesthetic so impaction of maxillary incisors causes aesthetic as well as psychological problems to the patient. Causes for impaction may be environmental as well as hereditary. The impacted maxillary central incisors are least common. The order of frequency of the impacted teeth are mandibular 3rd molar, maxillary 3rd molar, maxillary cuspid, mandibular cuspid, mandibular premolar, maxillary premolar and maxillary central and lateral incisors. Treatments modalities for impacted maxillary incisors are either surgical exposure followed by the orthodontic alignment in dental arch or surgical removal followed by implant or bridge. For most of the impacted maxillary incisors needs orthodontic treatment but there are so many factors that should fulfill the all the aspects that needed for orthodontic correction that includes, the position and direction of the impacted tooth, the degree of root completion, the degree of dilaceration, and the presence of space for the impacted tooth (7-12).

Surgical exposure followed by orthodontic treatment is the treatment of choice in many cases; however in this case an inverted and impacted teeth were better to removed surgically because of its alignment and close proximity to the nasal floor so surgical removal was done without damaging to the nasal floor and closure was given by 3-0 vicryl suture material.

CONCLUSION

In conclusion, bilateral inverted and impacted maxillary central incisors are rare and if found surgical removal of both central incisors are the best treatment of choice followed by prosthesis placement like bridge or implant.

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