

Orthodontic Management of Buccally Erupted Central Incisor: A Case Report

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Abstract:- Usually patients report to orthodontists with complaint in the aesthetic zone i.e. teeth that are seen in their smile. They might be functionally important to serve their purpose in normal occlusion. Since natural teeth cannot ever be replaced by other options available which might be chosen to compensate the irregularity with high precision and fineness, it is almost always chosen to retain what is natural. Natural teeth that are erupted ectopically or anywhere other than natural arch form can be corrected orthodontically with good prognosis. This article shows a case report where permanent central incisor is brought in the aesthetic zone with orthodontic treatment.

Keywords:- Piggy-Back Technique, Ectopically Erupted Permanent Central Incisor Management.

I. INTRODUCTION

Maxillary anterior teeth are categorized under high aesthetic zone. Patients usually have chief complaint with respect to the teeth that are visible in their smile and hence seek treatment for the same. Ideal range for teeth eruption divided according to age and sequence of teeth eruption is always taken into consideration while determining ectopic eruption or impaction of teeth. If a tooth erupts out of its normal position it is called as ectopic eruption. While impacted tooth is one which fails to erupt into the arch till occlusal table even after its eruption stage. Such ectopic eruption, impacted teeth and various other irregularities need orthodontic intervention. There may or may not be underlying cause associated with ectopic eruption. It is always noted in case history and during clinical examination. Trauma to deciduous teeth which in turn affects permanent tooth bud and various other factors affect and contribute in ectopic eruption.

II. CASE REPORT

A 12-year-old female patient reported in dept of orthodontics at rural dental college Loni with the chief complaint of ectopically erupted upper Permanent right Central Incisor.

Intra oral examination revealed buccally erupted highly placed right Central Incisor. Crown was visible at mucogingival region intraorally. Bilaterally Class I molar and canine relation. Extraoral clinical examination showed pleasant profile, competent lips, vertical growth pattern. On lateral cephalogram tracing Skeletal bases were in Class I relation to each other. While Dental relation showed proclined upper incisors and upright lower incisors. While growth pattern is suggestive of vertical growth pattern. On model analysis of study model cast and space analysis efficient space was available for bringing the right upper permanent central incisors.





➤ *Biomechanics:*



➤ *Treatment Objectives*

1. To derotate and align the right central incisor in maxillary arch
2. Well aligned upper and lower arches
3. Class I canine relationship
4. Pleasant smile and soft tissue profile

➤ *Treatment Plan and Progress*

Non extraction line of treatment was chosen. Initial alignment and consolidation of arches was done at the start. After sufficient space needed for mesiodistal width yet to accommodate permanent Central Incisor achievement rigid arch wire was placed. In the region of 11 a box was made which would allow the incisor to erupt in the space. A continuous 0.012 Niti was passed through all the tooth also 11 was involved as used in Piggy Back technique. With 2 to 3 activations of piggy back technique 11 was brought in the arch within 4 months.

➤ *Current Status*



III. SUMMARY AND CONCLUSIONS

There could be many etiopathogenesis involved with ectopically erupted teeth. If the aetiology is the cause for hindering its normal path of eruption in the arch it has to be resolved first and involving ectopic tooth in normal position for function and aesthetic follows. Such tooth have prominent roots, compromised periodontal tissues, highly placed frenum. Along with correcting their position in the arch, they usually need adjunctive therapy which has to be taken care of after their normal position in the jaw is achieved. Torque of the teeth descended in the arch is carefully assessed.

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