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"Management of Bilateral Retained Deciduous Canine: A Team Approach"

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ABSTRACT

Retained teeth have always created a problem with occlusion and often lead to unaesthetic appearance. However, timely supervision and management can prevent it. But sometimes it is required to be managed through a team approach.in this case report a case of retained maxillary canine precipitating secondarily as tongue thrusting is quoted. A multidisciplinary team approach was advocated for this case.

Key words: retained teeth, tongue thrusting, multidisciplinary approach

INTRODUCTION

Esthetics has always been a prime concern for the mankind. A person feels lack of confidence in case of anaesthetic appearance. A person always desires to achieve maximum pleasing and beautiful face. Teeth are the inseparable part of face and aesthetics. Teeth play a pivotal role in determining smile and aesthetics of face.

Teeth when shows malalignment either through crowding or spacing are non-desirable. A lot of malalignments can prevail in dentition which could infringe with the aesthetics. Amongst one such is the retained primary tooth. Retention of deciduous teeth over the required time period could possibly result in malocclusion.[1,2] It could lead to ectopic eruption of permanent successor. The mandibular second molar is the most common retained tooth followed by maxillary canine.[3] Overretention of maxillary canine results in displacement of permanent maxillary canine and making it the most common tooth with ectopic eruption. In this case report we present the multidisciplinary approach to treat the case of retained bilateral deciduous canine and missing permanent lateral incisors.

CASE REPORT

A 21 year old male patient reported to the department of orthodontics with the chief complaint of unaesthetic appearance primarily due to gap present between the teeth. On intraoral examination it was found that the maxillary deciduous canines were retained bilaterally. Due to this the permanent maxillary canines were shifted mesially. Also the absence of lateral incisors made way for permanent canines to erupt ectopically. On radiographic examination it was found that there was non development of buds for the lateral incisors. Due to this space was created between the teeth which led to development of tongue thrusting habit which further worsened the spaces between mandibular incisors. Right mandibular central incisor was lost under the tongue pressure.[4]

The treatment was planned in accordance with orthodontic and prosthodontics consultation. Retained deciduous teeth were extracted. Also mandibular left central incisor was also extracted as it had become grade 2 mobile and was buccally placed. Orthodontic treatment was undertaken keeping the facial esthetics in mind. Alignment and levelling of upper and lower arches was completed in 6-7 months. Initial alignment and levelling was achieved through 0.014", 0.016", 0.018" NiTi wires, followed by 17*25, 19*25 NiTi wires. The space consolidation was done on 19*25 S.S. wire space was maintained for the missing teeth to be taken care by the prosthodontic treatment.[5]

Further management was carriedprosthodontically with the fixed replacement of missing teeth. Porecelain fused metal full coverage veneer crowns with the modified ridge lap pontic design was planned. For the maxillary arch, canine and the first premolar served as the abutment units and for the mandibular arch two lateral incisors were the abutment teeth. Tooth preparation was carried out on these and provisional restorations were given to check the aesthetics. Cord

packing was done using 3-0 impregnated gingival retraction cord and the final impression was made in the addition silicones. The metal tryin was done and checked for any discrepancy. The final porcelain fused to metal restoration was fabricated in accordance with the shade matching. The final prosthesis was cemented and the space management was achieved.[6]

Fig. 1: Preop frontal facial view

Fig. 2: Preop lateral view

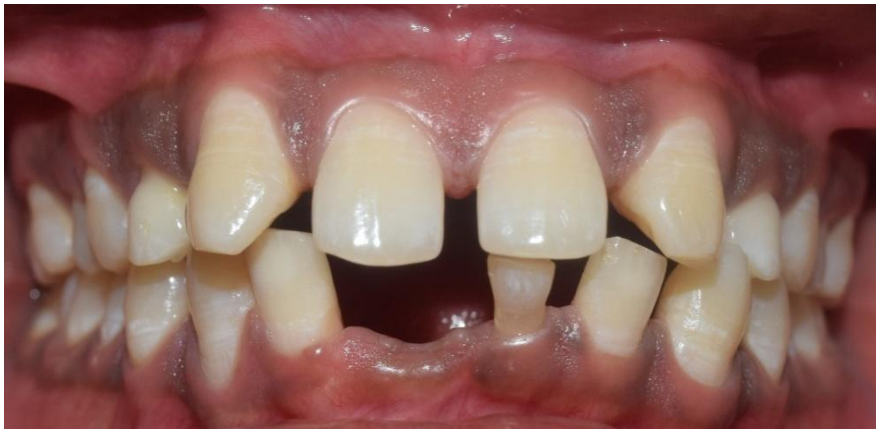

Fig. 3: Preopinterocclusal view

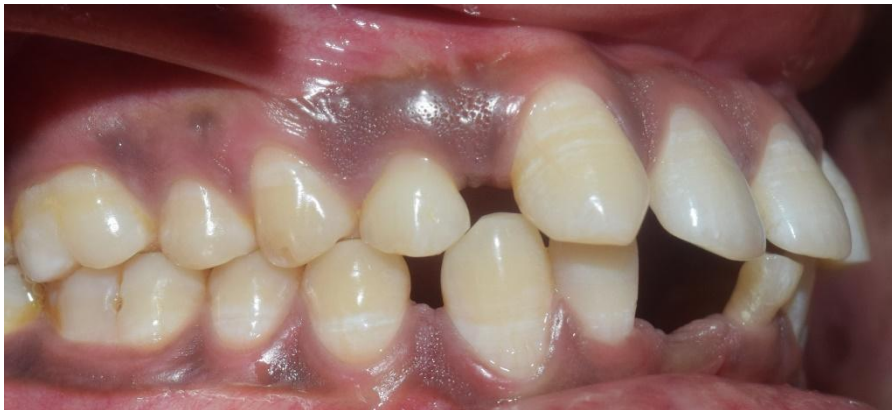

Fig. 4: Preopinteroral lateral view

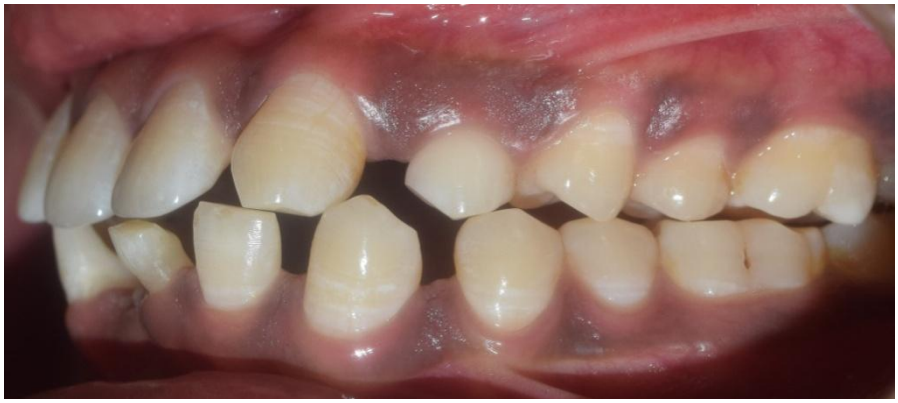

Fig. 5: Preopinteroral lateral view

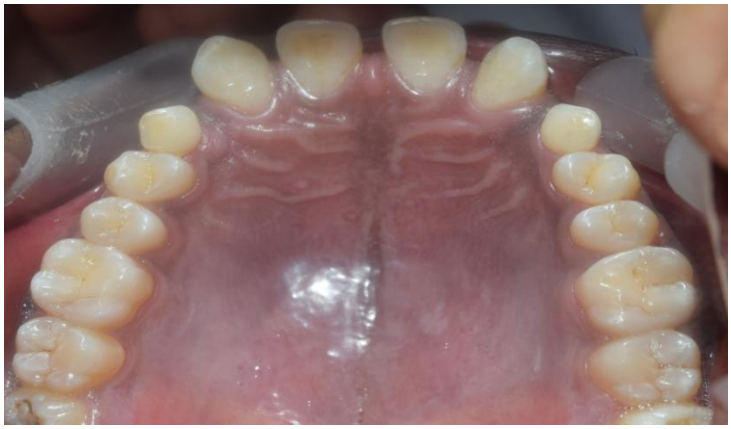

Fig. 6: Preop maxillary occlusal view

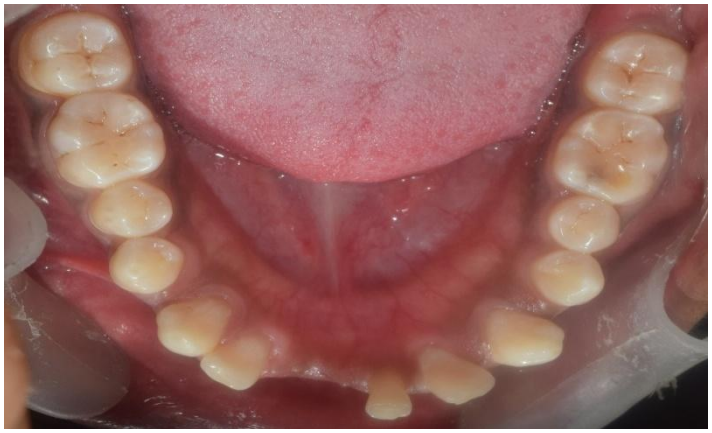

Fig. 7: Preop mandibular occlusal view

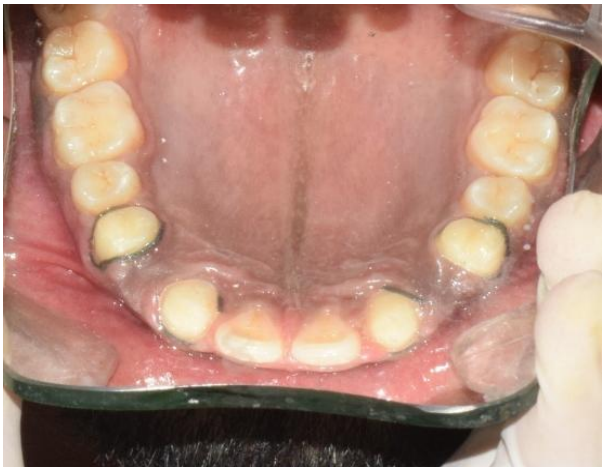

Fig. 8: Prepared maxillary teeth

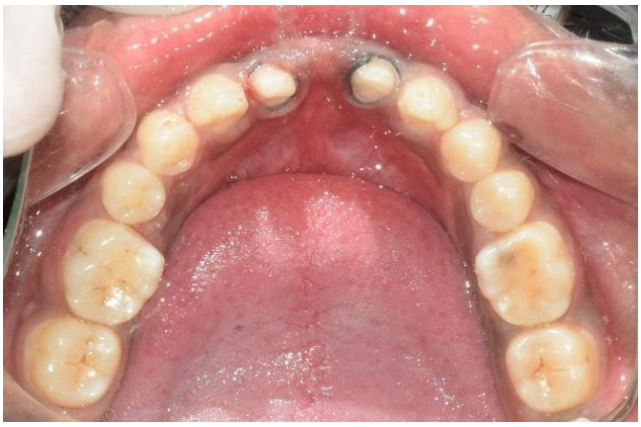

Fig. 9: Prepared mandibular teeth

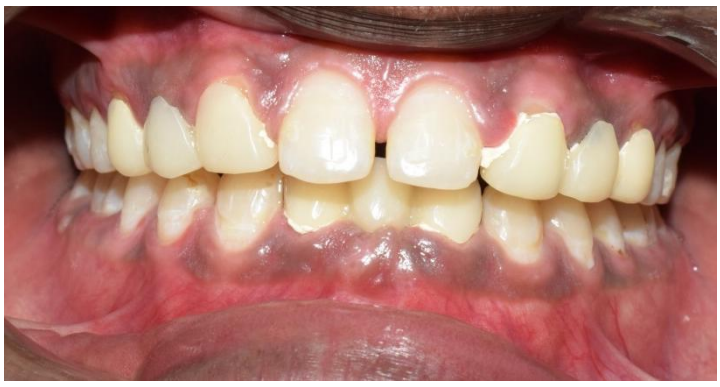

Fig. 10: Provisionalization

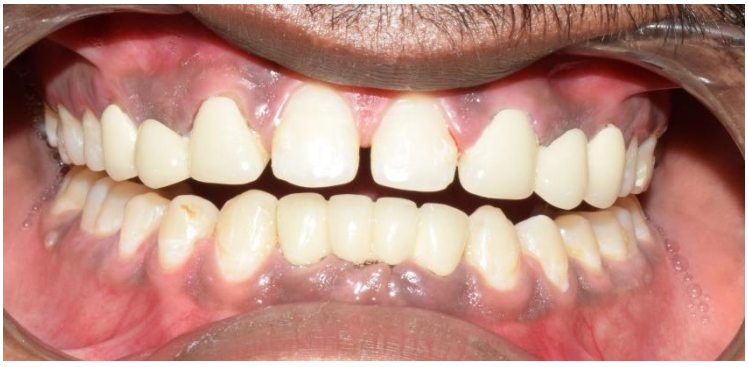

Fig. 11: Final prosthesis in place

DISCUSSION

Retained teeth have always hindered and acted as mal-alignment creators. Due care and proper supervision plays a crucial role in development of near ideal occlusion. Periodic checkups of the patient always give the best results in the field of orthodontics. However sometimes it becomes impossible to avoid major treatments but intercepting at the correct age often prevents unnecessary complicated treatment procedures.

A multidisciplinary team approach which includes orthodontic, prosthodontics, periodontic and other modalities often gives the best treatment results.

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