Anomalies of Tooth Number, Non-Syndromic Oligodontia: Case report.

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Introduction

Anomalies of tooth number is a genetic disorder that can be defined in many ways based on the number of missing teeth. Hypodontia is the term used to define one to five missing permanent teeth, oligodontia is the term specifically used when more than six teeth are missing excluding third molars. On the other hand, anodontia is used to describe the complete absence of all dental structures (1). Oligodontia, when present, usually presents as part of a syndrome such as ectodermal dysplasia and rarely as isolated entity (2). The incidence of oligodontia varies from 0.08% to 0.16% and is more common in girls with a ratio of 3:2 (3). Diagnosis and confirmation of congenitally missing teeth is most often done using radiographic imaging (4). Treatment of oligodontia cases requires multidisciplinary approach of space management with orthodontic therapy, removable or fixed partial dentures, implant retained prosthesis, or a combination of these treatment strategies (5). This case report describes the diagnosis of a fourteen-year-old male patient with non-syndromic oligodontia.

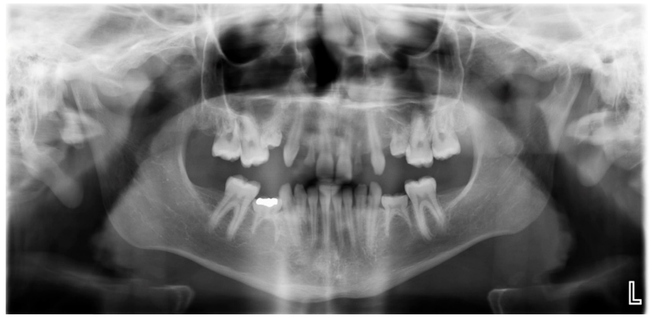

Figure 1 : Panoramic radiograph, congenitally missing upper and lower third molars, upper and lower first and second premolars, upper lateral incisors. Over retained upper and lower second primary molars, upper lateral incisors and lower primary canines.

Case report

Figure 2 : Extra oral and intra oral photographs.

Fourteen-year-old male presented to Tufts University School of Dental Medicine (TUSDM), Pediatric Dentistry department with the chief complaint of missing teeth and in need for replacement. Medical history revealed patient had Autism and ADHD, was never diagnosed with any syndrome, was taking no medications and had no known drug allergies. Dental and social history disclosed that the patient had a current dental home. He lived in a fluoridated area with both parents and siblings. Upon extra-oral clinical examination, no abnormalities were detected.

Intra-oral examination showed all primary second molars were over retained, submerged, and ankylosed. Primary upper lateral incisors and lower canines were over retained. Sixteen permanent teeth were recorded missing clinically including third molars. Panoramic radiograph confirmed the congenital absence of permanent teeth and the retention of primary teeth. Mother reported familial history of congenitally missing teeth from the mother and grandmother side. The following treatment options were discussed with the patient and his mother: 1. no treatment and just monitor the dentition, 2. maintain the retained primary teeth and restore the occlusal part of the crown to maintain occlusion and function. 3. complete oral rehabilitation after consultation with the orthodontic and prosthodontic department for space maintenance, implants, and prosthodontic replacement. The goal of the oral rehabilitation is to provide and restore function, aesthetics, and occlusion. Complete oral rehabilitation will allow the patient to have better quality of life, greater self-esteem, and better social acceptance. Patient and mother preferred the complete oral rehabilitation treatment option and therefore patient was referred for orthodontic consultation and treatment planning.

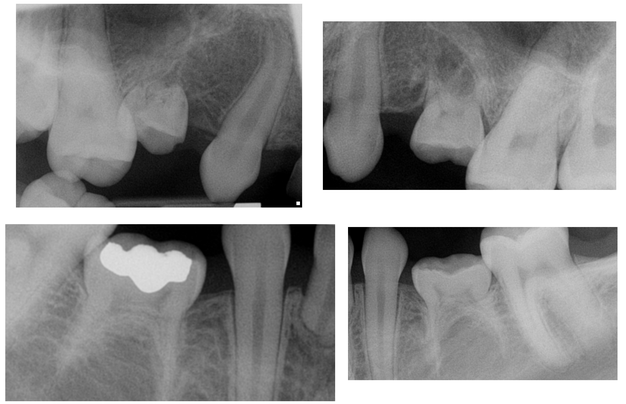

Figure 3 : Periapical radiographs confirming missing upper and lower premolars, over retained second primary molars.

Conclusion

Careful diagnosis along with multidisciplinary approach for the treatment is essential to provide high standard oral care for patient with congenitally missing teeth. Treatment of such cases will not only improve oral function but will also have a positive psychological impact on the patient.

References

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