

COMPLETE ORAL REHABILITATION OF SEVERELY MUTILATED TEETH DONE UNDER GENERAL ANAESTHESIA - A CASE REPORT



Dr. Neena I.E.,
Asst. Professor
Dept. Of Pedodontics

ABSTRACT

The esthetic restoration of severely mutilated primary anterior teeth has for a long time been a challenge for the pediatric dentist, not only because of the available materials and techniques, but also because the children who require such restorations are usually among the youngest and least manageable group of patients. This case report describes the challenging task of treating a three-year-old early childhood caries patient with mutilated maxillary incisors with composite resin using a custom made post made with 0.7 mm wire and

posteriors where endodontic treatment has been done and stainless steel crown has been placed.

KEYWORDS:

Esthetic restoration, Composite,
Early childhood caries.

INTRODUCTION

A problem commonly faced in pediatric clinics is the restoration of primary maxillary incisors severely destroyed by trauma or caries. Most cases are observed among children with nursing bottle caries. In early childhood caries, there is early carious involvement of the maxillary anterior teeth.^{1,2,3}

Non pharmacologic behavior-management techniques are primary techniques for treating children in the dental chair. Alternative methods such as conscious sedation and other forms of sedation are also widely used. However, in some circumstances these techniques may fail and the use of general anaesthesia (GA) becomes the only resource to provide dental treatment for children in a safe and effective way.⁴

CASE REPORT

A 3-year-old female patient reported with a complaint of severely decayed teeth to the department of pedodontics and preventive dentistry, R.V.Dental college, Bangalore. The child was emotionally immature and highly uncooperative.

INTRAORAL EXAMINATION

Intraoral examination revealed multiple carious lesions, and 54, 52, 51, 61, 62, 64, 74, 75, 84, showed pulp involvement. Crown portions of maxillary incisors and posteriors were grossly destructed Figure 1, 2 and 3. It was decided to do pulpectomy in relation to 54, 52, 51, 61, 62, 64, 74, 84, and pulpotomy in 85. Post and core in 52, 51, 61, 62 followed by strip crown in 51, 52, 61 and 62. Consent was taken from the parents. Then patient was admitted to seva kshethra hospital, Bangalore and was given general anaesthesia. Under GA, pulpectomy and pulpotomy was done followed by stainless steel crown and composite restoration (strip crown) using custom-made posts were performed. For building core in deciduous anterior teeth, about 3- 4 mm of cement was removed from the coronal end of the root canal, and 1 mm of glass ionomer cement was placed. A 0.7-mm stainless steel orthodontic wire was bent using orthodontic pliers into omega loop shape. The incisal end of the loop of the wire projected 2-3 mm above the remaining structure. The loop was inserted into the canal with composite. A strip crown was used and the crown was reconstructed.

This provided better mechanical retention and support for the restorative material. The occlusion was checked and after the removal of any interference, final finishing and polishing of the restoration was performed using sofex tips. After completion of the procedure, a post operative photograph was made. Home care instructions, including oral hygiene measures and diet counseling, were given to the parents. Recall checkup was scheduled after a period of 1 week, followed by recall checkup after every 3 months to assess the maintenance status of oral hygiene.



Fig 1: Intraoral photograph showing grossly decayed teeth



Fig 4: Post treatment photograph After six months



Fig 2: Maxillary arch

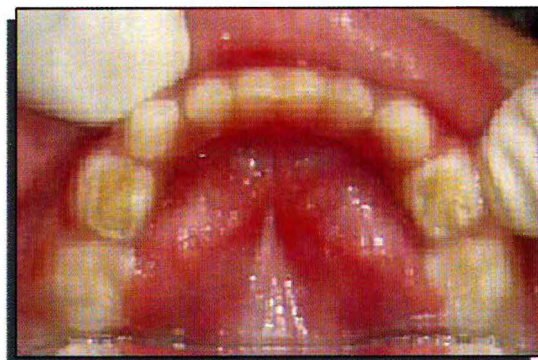


Fig 3: Mandibular arch

DISCUSSION

Dental treatment under GA is an expensive alternative but on certain occasions the method of choice for treating unmanageable children. It is indicated for very young children who require extensive conservative dentistry and are unable to accept treatment in the dental chair, for children who are medically compromised, or for children who require oral surgical procedures. An important consideration for children who are unable to cooperate due to fear, anxiety or young age is their subsequent acceptance of care using other methods with low risk and low impact.

The aim of GA is to restore the child's oral health in a single visit.⁵ Studies have shown that intra-canal retention in primary teeth can be obtained by directly building resin composite posts or preparing an "inverted mushroom shaped" undercut in the root canal prior to the build up of the resin. However, resin composite posts have low strength of loading. Ushamohan Das et al. also used a custom-made post using an orthodontic wire followed by strip crowns and achieved excellent cosmetic results in a child patient. This led us to use the technique to do the complete oral rehabilitation of the patient.

CONCLUSION

This method of treatment provides extensive complete oral rehabilitation in a short period of time and in a single visit, allowing immediate relief of pain, even with little or no cooperation from the child.

REFERENCE

1. Johnsen DC. Characteristics and background of children with "nursing caries". *Pediatr Dent* 1982;4:218-24.
2. Ripa LW. Nursing caries: A comprehensive review. *Pediatr Dent* 1988;10:268-82.
3. Yui CK, Wei SH. Management of rampant caries in children. *Quintessence Int* 1992;23:159-68.
4. Enger DJ, Mourino AP. A survey of 200 paediatric dental general anesthesia cases. *J Dent. Child* 1985;52:36-41.
5. Navit S, Katiyar A, Samadi F, Jaiswal JN. Rehabilitation of severely mutilated teeth under general anesthesia in an emotionally immature child. *J Indian Soc Pedod Prev Dent* 2010;28:42-44.
6. M.Usha, V.Deepak, S.Venkat, M.Gargi Department of Pedodontics and Preventive Dentistry, V. S. Dental College and Hospital, V. V. Puram, Bangalore - 560 004, Karnataka, India.