

DAY CARE GENERAL ANESTHESIA IN PEDIATRIC DENTAL PRACTICE- A CASE REPORT

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Abstract:

Dental caries is a single commonest chronic disease of childhood. It is mentioned as an early childhood caries if occurs in a child aged seventy-one months or younger where as in the rampant caries, there is early participation of pulp, and gross destruction of the maxillary anterior teeth same like in posterior teeth. This lead the way to decrease in efficiency of mastication, speech difficulty, esthetics compromised, development of the unusual tongue habits, and abnormal occlusion and psychological problems. The recovery of badly decayed deciduous teeth is typically a procedure that presents a unusual challenge to pediatric dentists, particularly in an unhelpful child. The purpose of this case report is to provide a full mouth rehabilitation in an uncooperative child under day care general anesthesia.

Key Words: General anesthesia, Dental caries

INTRODUCTION

Treating young children is often an exacting state for the pediatric dentist. Young one are often uneasy in the dental operatory room and their level of co-operation is restricted. Treatment may be successful only in hands of an expert pediatric dentist. Behavior management approach and sedation offer a lot of chances, even in very young child, and may incorporate child co-operation for required treatment. Children with multiple carious lesion presents some additional problem. Thus, general anesthesia may be the treatment modality of choice for serving quality dental care. The purpose of the case report is to deliver total dental rehabilitation for children with multiple carious lesions under day care general anesthesia.

CASE REPORT

A 6-year-old male patient reported with parents to the pediatric dental clinic. The parents complained of decayed teeth and pus discharge in lower left back teeth region since 3 days back. Patient was completely asymptomatic

3 days back when he had pus discharge in lower left back region of jaw. He had pain and difficulty in chewing food. With this he arrived to the Department of Pedodontics and Preventive dentistry, Teerthanker Mahaveer Dental College and Research Centre, Moradabad, U.P.

As observed by the specialist the child was awkward. When he was asking to sit on the dental chair he ignored the instructions. somehow managed to take OPG, and diagnosis was made as multiple carious teeth with irreversible pulpitis in upper anterior and abscess in lower left molar (Figure 1).

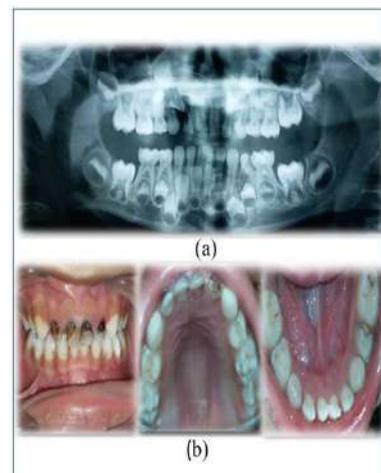


Figure 1. (a) preoperative OPG
(b) preoperative view

Primary behavior-management techniques were tried on the child but had to be given up soon as the child was uncooperative. Keeping in mind the age of the child, complexity of the procedure and the complications that may arise the option of pharmacological means was given to the parents of the child, i.e., sedation and GA. The father was already having idea about GA, told us to proceed with GA. The whole treatment plan was made to understand to the parents.

After due appointment, the patient was admitted to the hospital one day before the treatment planned. Consent was taken in written from the parents. A thorough examination of the mouth revealed multiple decayed teeth altogether four quadrants.

Treatment was planned as extraction i.r.t. 74 followed by band and loop space maintainer. Composite restoration i.r.t. 54, 64 followed by stainless steel crowns. Pit and fissure sealant i.r.t. 84, 85, 75, 55, 16, 65. Pulpectomy i.r.t. 52, 51, 61, 62 followed by strip crown. Composite Restoration i.r.t. 83, 53, 73 (Figure 2).

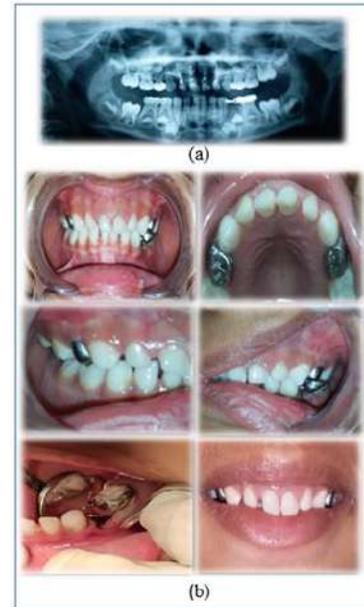


Figure 3. (a) postoperative OPG
(b) postoperative view

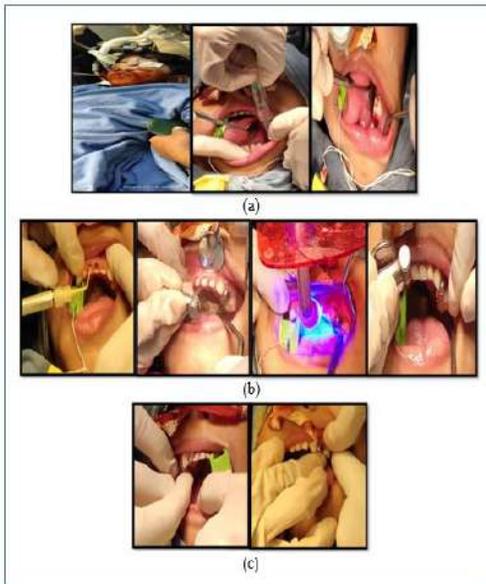


Figure 2. (a) Extraction i.r.t. 74 (b) Pulpectomy followed by Strip Crown i.r.t. 51, 52, 61, 62 (c) Stainless Steel Crown i.r.t. 54, 64

In maintenance phase patient was recalled on next day (Figure 3).

DISCUSSION

In spite of the decreasing prevalence of tooth decay in current decagon, a considerable figure of children with early childhood caries (ECC) are still there. Many of these child patients are youngsters and have multiple decayed teeth, which requires prolong and multiple visits. This in turn may cause a problem with behavior modification. Numerous behavioral and therapeutic approaches for the treatment of a child are available.²

In the conventional care setting many young kids with extensive dental association, leads to difficulty in successful treatment, for such cases oral rehabilitation under general anesthesia is recommended to provide quality dental care.²

General anesthesia (GA) was defined as “a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation could also be required due to depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may also be impaired.”³ – ASA.

Guidelines on use of sedation and general anesthesia for pediatric patient provided by AAPD. The first is for “patients who are unable to cooperate due to a lack of psychological or emotional maturity and/or mental, physical or medical disability.” They also stated that GA is useful in case of children

who are extremely fearful, anxious or unable to communicate, or in instances where it may protect the “developing psyche.” Coming towards procedures, they stated that GA is appropriate for surgical procedures⁴. They also stated that alternative behavior management techniques should be applied before we make use of GA.⁵

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CONCLUSION

Treatment of children with a highly carious involvement encounter, behavioral problems and with special health care needs in a solitary sitting under GA which will result in an apparently improved dental health. Therefore, a pediatric dentist must have the knowledge of performing dental procedures under general anesthesia for management of uncooperative children and children with special health care needs, thus, rendering better treatment.

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