

FULL MOUTH REHABILITATION OF EARLY CHILDHOOD CARIES- REPORT OF TWO CASES**Dr. Ifzah*¹ and Dr. Zain Patel²**¹*Consulting Pedodontist, Maya Cleft Centre, Srinagar.²Consulting Orthodontist, Pune Dental Centre, Pune.***Correspondence for Author: Dr. Ifzah**

Consulting Pedodontist, Maya Cleft Centre, Srinagar.

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ABSTRACT

Early childhood caries (ECC) is a major public health problem, being the most common chronic infectious childhood disease, which is difficult to control. Early childhood caries can result in pain, impairment of function and several other deleterious effects on children. To prevent further tooth destruction and encourage better overall health, treatment should be instituted as early as possible. Report of a series of two cases of early childhood caries and their management.

KEYWORDS: Caries, Pulpectomy.**INTRODUCTION**

Childhood and early adolescence are a crucial period in the development of healthy dentition and caries during this period can have a deleterious effect on the children's health. Though not life-threatening, its impact on individuals and communities is considerable, resulting in pain, impairment of function, deleterious influence on the child's growth rate, body weight and ability to thrive, thus reducing quality of life.^[1]

Early childhood caries is defined by the presence of one or more decayed, missing, or filled tooth surfaces in any primary tooth in a child 71 months of age or younger. In children who are younger than 3 years of age, any sign of smooth-surface caries is indicative of severe ECC (S-ECC).^[2,3]

The first step in development of early childhood caries is primary infection by the bacterium *Streptococcus mutans*. The second step is the accumulation of these organisms to pathogenic levels as a consequence of frequent and prolonged oral exposure to a cariogenic substrate. The final step is rapid demineralization and cavitation of enamel, resulting in rampant caries. As the disease progresses, decay appears on the occlusal surfaces of the primary maxillary first molars, with subsequent spread to other primary teeth, resulting in the eventual destruction of the primary dentition.^[4,5]

ECC can also lead to rampant decay, infection, pain, abscesses, chewing problems, malnutrition,

gastrointestinal disorders, and low self-esteem. Hence it is important to manage caries as early as possible.

CASE REPORT 1

A 4-year-old female patient reported to Maya Cleft Centre and Centre for Aesthetic Facial Surgery with chief complaint of pain in lower right and left back tooth region. Pain was dull and intermittent which aggravated on eating food. Intraoral examination revealed multiple carious lesions, with 51, 52, 53, 62, 63, 64, 74, 75, 84 and 85 (Figure 1 and 2). Provisional diagnosis of chronic irreversible pulpitis was made based on the history and clinical examination. Intraoral periapical radiographs revealed pulp involvement in 64, 74 and 84. Diagnosis of early childhood caries was thus made.

Treatment plan was carried out in multiple sittings as the patient was young. The main aim of the treatment was to eliminate the pain and infection, reduce the load of the bacterium *Streptococcus mutans* in the oral environment, eliminate the carious lesions and improve the aesthetic appearance of the teeth to reduce the likelihood of related psychological problems.

At the initial appointment, oral hygiene instructions and dietary counseling was done. Composite restoration was carried out in 51,62,63,75,85. Pulpectomy was carried out in 52,64,74,84 (Figure 3 and 4). Strip crown was cemented in 52 and stainless steel crowns were cemented in 64,74,84 (Figure 5).



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

CASE REPORT 2

A 6 year-old female patient reported to Maya Cleft Centre and Centre for Aesthetic Facial Surgery with chief complaint of multiple decayed teeth. Intraoral examination revealed multiple carious lesions in 51, 52, 53, 54, 55, 61, 64, 65, 73, 74, 75, 83, 84 and 85. Root stump was present in 64. Preshedding mobility was seen in 61 (figure 1, 2 and 3). Intraoral periapical radiographs revealed pulp involvement in 54, 74, 75 and 85. Based on the history, clinical and radiographic findings diagnosis of severe early childhood caries was made.

At the initial appointment, preventive treatment, oral hygiene instructions and dietary counseling was done. Composite restoration was carried out in 52,53,55,65,73,83,84. Pulpectomy was carried out in 74, 75 and 85 followed by placement of stainless steel crowns (Figure 5). Extraction was carried out in 51,54,64. Bilateral band and loop was cemented in relation to 55 and 65 (Figure 4). Post treatment changes seen in frontal intraoral photograph (figure 6).



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

DISCUSSION

Early childhood caries is similar to other types of caries, however it may differ in terms of biology and feeding pattern. Patterns of behavior that affects dental health are established early in children's lives. Consequently, prenatal and perinatal educational efforts should be stressed.

Early childhood caries has a detrimental effect on the health and quality of life of the child. The child's eating pattern is affected which in turn has a detrimental effect on the health of the child.^[6]

ECC is a preventable disease. The physical, psychological and economic consequences of ECC can be avoided through the education of prospective and new parents on good oral hygiene and dietary practices, using agents such as fluoride and non-cariogenic sweeteners. Caries management mainly depends on early detection, proper counseling and the involvement of health professionals and caregivers.^[7]

The most important function of space maintainers is to maintain the mesiodistal relationship in the arch.^[8] Children with the loss of primary molars before 7½ years of age develop more crowding than children with no loss.^[9] Band and loop space maintainer is indicated for premature loss of unilateral or bilateral primary maxillary or mandibular molars. Band and loop space maintainers adjust easily to changing dentition.^[10] Owing to the age of the patient in second case it was decided to fabricate bilateral band and loop space maintainers in the upper arch.

CONCLUSION

ECC is preventable and manageable with the right information and skills. A closer co-operation between healthcare professionals, dental hygienists and Pediatric dentists is required. Treatment of ECC can be accomplished through different types of intervention, depending on the progression of the disease, the child's age, as well as the social, behavioral and medical history of the child.

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