

## Early Childhood Caries : A Dental Form Of Health Care Neglect

Manish Goel\*, G. Venkanna Babu\*\* and Manish Sharma#

\*Professor, Department of pedodontics and preventive dentistry,  
Maitri College of dentistry and research centre, Durg, (C.G.)

\*\*Senior Lecturer, Department of pedodontics and preventive dentistry,  
Maitri College of dentistry and research centre, Durg, (C.G.)

#Professor, Department of prosthodontics,  
Sardar Patel institute of dental sciences, Lucknow (U.P)

*A child is defined as a young human being below the age of full physical development. A child is dependent on his parents or caretakers for the entire physical and mental wellbeing. Any aberration in the parent's attitudes towards the child results in abuse and neglect of the child. Dental neglect can be indicative of a wider welfare picture of child neglect and abuse and is the most prevalent form of health care neglect especially in India. Failure to seek or obtain proper dental care may result from factors such as family isolation, lack of finance, parental ignorance, or lack of perceived value of oral health. Early childhood caries, a form of dental caries, can occur any time after teeth eruption and may occur in infant or children with frequent and prolonged exposure to liquids rich in sugar especially at night. Neglecting early childhood caries can lead to pain, infection, loss of tooth and function which can adversely affect activities necessary for normal growth and development of an infant or a child. At present, dental neglect is a field especially related to early childhood caries that has received little direct attention. Collaborative working both between dental and other child caring disciplines is necessary to deal with this problem. Pediatricians and other child health care professionals can have a major impact on prevention of early childhood caries by early intervention.*

**Keywords:** Dental neglect, early childhood caries, dental caries, child neglect.

### 1. INTRODUCTION

A child is defined as a young human being below the age of full physical development. The time spent by the child in this period is called childhood. A child is dependent on his parents or caretakers for his entire physical and mental wellbeing; hence molding the child into a good human being is the total responsibility of the parents/ caretaker. Any aberration in the parent's attitudes towards the child results in abuse and neglect of the child. Child neglect is a form of child maltreatment and is defined as "the persistent failure to meet a child's basic physical and/or psychological needs, likely to result in the serious impairment of the child's health or development" [1]. When a child with treatable disease has serious deterioration of the condition because the parents and caretakers repeatedly ignore health care recommendations, and, thereby, health care neglect occur. Early childhood caries is a syndrome with both disease and behavioral component. Untreated caries may lead to early loss of primary teeth and can effect the growth and malfunction of permanent dentition.

---

## 2. DISCUSSION

Dental neglect is the most prevalent form of health care neglect in India. American academy of pediatric dentistry defines dental neglect as “the willful failure of parent or guardian to seek and follow through with treatment necessary to ensure a level of oral health essential for adequate function and freedom from pain and infection” [2]. Dental caries, periodontal disease and other oral conditions, if left untreated can lead to pain, infection and loss of function. These undesirable outcomes can adversely affect activities necessary, for normal growth and development.

Failure to seek or obtain proper dental care may result from factors such as family isolation, lack of finance, parental ignorance, or lack of perceived value of oral health [3]. The point at which to consider a parent negligent and to begin intervention occurs after the parents has been properly altered by a health care professional about the nature and extent of the child condition, the specific treatment needed and the mechanism for accessing that treatment [4]. Poor oral health can profoundly affect an infant’s or child’s health and well-being. Early tooth loss caused by advanced tooth decay can result in failure to thrive in young children and may predispose children to improper alignment of the jaw and teeth. Oral health problems can lead to impaired speech development, inability to concentrate on important early learning experiences, and absence from school or child development programs. Severe oral disease can lead to difficulty in chewing, reduced self esteem, difficulty in sleeping, missed opportunities for learning, and many other things. Dental neglect can be indicative of a wider welfare picture of child neglect and abuse. There is evidence which indicate that abused children have higher levels of untreated dental caries than their non abused peers [5]. The indicators of dental neglect are untreated rampant caries, untreated pain, infection, bleeding or trauma affecting the orofacial region, and history of lack of continuity of care in the presence of identified dental pathology [6].

Dental caries is most common chronic childhood disease which is five times common than asthma [7]. Different studies have shown prevalence of dental caries in India among 1 to 5 years old children in the range of 42% to 55%. Early childhood caries (ECC), previously termed nursing caries or baby bottle decay, can occur any time after teeth eruption, may occur in infants or children with frequent and prolonged exposure to beverages high in sugar, milk, fed in a bottle or sippy cup and even medicinal syrups especially at night. ECC has also been associated with frequent and prolonged breast feeding, frequent snacking on foods high in sugar and coating pacifiers with sweeteners [8]. Other risk factors for ECC include altered salivary composition and volume, and blockage of saliva flow in a bottle fed infant. The pattern of decay that results from such practices is characteristic and affects most severely the maxillary deciduous incisors and deciduous first molars followed by deciduous second molars and canines. Mandibular incisors are usually spared from the decay process because of the position of the tongue during suckling and salivary secretions of submandibular salivary gland.

## 3. PREVENTION

The younger the age at which dental caries begins, the greater the risk of further decay, both the level of caries attack and the infant’s or child’s resistance can be managed through oral health supervision that promotes positive health behaviors including good oral hygiene, use of fluorides and dental sealants, good dietary habits, and chemical or physical reduction of dental plaque [9]. The misconception that milk teeth is dispensable adds more to problems.

Parents and even health professionals including dentist don't bother about milk teeth, thinking they are going to be replaced any way.

Pediatricians and other child health care professionals can have a major impact on prevention of early childhood caries because of the opportunities provided by early intervention such as counseling the families, identifying high risk children, initiating timely dental referrals, and administration of appropriate fluoride modalities. In our country pediatricians are often the first health care professionals who are consulted for any type of health problems; that's why they are the one who can do a lot in preventing child dental neglect.

Pediatricians can help ensure that infants and young children receive the care they need by referring infant to a dentist for an oral examination within 6 months of the eruption of the first primary tooth and no longer than the age of 12 months and by establishing contact between parents and dentist. Parents should be reassured that appropriate analgesic and anesthetic procedure will be used to assure the child comfort during dental procedure. Thus, health care professionals can play a vital role in providing guidance to parents for promotion of oral health.

When dental neglect has been recognized, a tiered response has been recommended, with following three stages of intervention, implemented according to the level of concern [10].

- (1) Preventive dental team management;
- (2) Preventive multi-agency management; and
- (3) Child protection referral.

In preventive dental team management, care is focused on relief of pain and other symptoms, followed by appropriate restoration of function and appearance. Concerns are raised with parents, explaining what changes are needed, offering support, keeping accurate records, continuing to liaise with parents or carers, and reviewing progress. Dental treatment planning is made realistic, achievable with minimum appointments to overcome problem of poor attendance. If situation deteriorates preventive multi-agency management is used. In this dentist consults other professionals who have contact with the child and jointly discuss any concerns about the child, and seek to clarify what steps can be taken to support the family and address the concerns. If at any point there is concern that the child is suffering significant harm from dental neglect or showing other signs of neglect or abuse, a child protection referral is made following local child protection procedures. The reason for referral is made clear, specifying the concerns and what they indicate in relation to harm or potential harm to the child. A routinely high standard of clinical record keeping is essential to support this procedure.

#### **4. ANTICIPATORY GUIDANCE TO PREVENT EARLY CHILDHOOD CARIES**

- (a) Parents should be advised that dental plaque, a sticky film that adheres to the teeth and surrounding tissue should be cleaned. Infant's gums should be cleaned with a damp cloth after feeding; brushing of teeth should be started as soon as the first tooth erupts.
- (b) Frequent exposure to small amounts of fluorides each day is the best way to reduce the risk for developing dental caries. Use of fluoridated tooth paste should be introduced at around the age of 2.
- (c) To prevent the transmission of bacteria that cause tooth decay from the parents via saliva to the infant, parents should be advised avoid testing the temperature of the

- bottle with the mouth, sharing utensils especially spoon, or cleaning a pacifier or a bottle nipple with saliva.
- (d) Do not put the infant to sleep with a bottle or sippy cup or allow frequent and prolonged bottle feeding or use of sippy cups containing beverages high in sugar during the day to prevent sugary fluids from pooling around the teeth, which can increase the infant's risk for tooth decay.
  - (e) Never add cereal to a bottle. This causes sugary fluids to pool around the teeth. Feed the infant solid foods with a spoon or fork once the infant is able to do so.
  - (f) Wean the infant from the bottle as the infant begins to eat more solid foods and drink from a cup.
  - (g) Serve foods containing sugar at mealtimes only and limit the frequency and amount.

#### 4. CONCLUSION

The education and involvement of all maternal and child health care professionals in preventing early childhood caries and in encouraging regular dental visits is essential. Dental neglect in children should be considered a priority for further research. Relationship between oral health and child maltreatment should be investigated. Diagnostic criteria for dental neglect and thresholds for intervention should be established, and management strategies for early childhood caries should be further investigated.

#### 5. REFERENCES

- [1] HM Government, "*Working together to safeguard children*", the stationary office, Landon, <http://publications.everychildmatters.gov.uk>, 2006.
- [2] American academy of pediatric dentistry, "*Reference manual*", pediatric dentistry, pp. 19-24, 1997-1998.
- [3] Sanger R.G., Bross D.C., "*Clinical management of child abuse and neglect: a guide for the dental professional*", Quintessence publishing Co, inc, Chicago, 1984.
- [4] California society of pediatric dentist, "*Dental neglect when to report*", California pediatrician, pp. 31-32, 1989.
- [5] Sidebotham Peter, "Science daily", Aug 31, 2009.
- [6] Loochtan R.M., "*Dental neglect in children: definition, legal aspects and challenges*", *Pediatrdent*, Vol. 8, pp. 101-102, 1986.
- [7] U.S. department of health and human services, "*Oral health in America: a report of the surgeon general*", Rockville, md: national institute of dental and craniofacial research, 2000.
- [8] Milgrom P., Weinstein P., "*Early childhood caries: a team approach to prevention and treatment*", Seattle, wa: office of continuing dental education, university of Washington, 1999.
- [9] Casamassimo P., "*Bright futures in practice: oral health*", Arlington, va; national center for education in maternal and child health, 1996.
- [10] Harris J., Sidebotham P., Welbury R. et al, "*Child protection and the dental team: an introduction to safeguard children in dental practice*", Sheffield: Committee of postgraduate dental deans and directors, <http://www.cpdtd.org.uk>, 2006.