

A Case Report on Dental Management of a Toddler with Autism

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Abstract

Children with special health care needs receive less oral care than the normal population, in spite of the high level of dental diseases among them. They are at an increased risk for oral diseases throughout their lifetime. This paper reports a case of a toddler with congenital unusual thick convolutions of the cortex resulting in a condition called pachygyria. Intra oral examination showed multiple abscesses with poor oral hygiene. As the patient was lacking cooperative ability, treatment of full mouth rehabilitation as needed. The parents were advised for regular dental check-ups and informed about maintenance of good oral hygiene. This case report demonstrates the importance of oral hygiene maintenance of special children and also about their short and long term dental treatment protocol for maintaining good oral health.

Keywords: *Autism spectrum disorder, Special child, Health care needs, Preventive measures*

Introduction

American Association of Pediatric Dentistry defines special health care needs as “any physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires medical management, health care intervention, and/or use of specialized services or programs” [1]. Such individuals are at an increased risk for oral diseases throughout their lifetime. It has been reported that dental treatment is the greatest unattended health need of the disabled people [2]. Among all the developmental disabilities, ‘Autism’ is said to be the second most common developmental disability next to mental retardation [3]. Children with autism spectrum disorders have multiple medical and behavioral problems like obsessive routines, repetitive behaviors, unpredictable body movements, and self-injurious habits which complicate dental care. Their oral health care needs are compounded by their disorders, medications and lack of oral hygiene at home [4]. The findings presented in this case report is about management of a toddler with autism and also emphasizes the early preventive measures in these patients.

Case report

A 5-year old male patient reported to the department of Pediatric and Preventive Dentistry with the chief complaint of decayed teeth in upper and lower left and right back teeth region. The patient showed signs of both physical and mental retardation. Medical history revealed that the child was diagnosed autism spectrum disorder since birth and has poor muscle tone and control over his extremities. The child was not under any medications and was undergoing only speech therapy. The past dental history revealed that the child underwent treatment under general anaesthesia where indirect pulp capping was done in relation to maxillary left 1st molar and mandibular

left and right 1st molar with a final Glass ionomer restoration. Pulpectomy was done followed by stainless steel crown in the maxillary right 1st primary molar. Extraction of left primary central incisor was done as it was difficult to restore. Diet counseling and instructions to maintain proper oral hygiene were given to the parents.

Since the child fell under lacking cooperative ability according to Wright's classification (1975), usual clinical and radiographic examinations were not possible on the dental chair. Intra-oral examination was done in knee-to-knee position which revealed dentoalveolar abscess was noticed in relation to mandibular right 1st molar. Glass ionomer restorations were dislodged with formation of secondary caries. New carious lesions were noticed in primary right central incisor and left lateral incisors. As dental treatment for such special child was not possible in a regular dental set up, treatment was planned under general anaesthesia with the consent from their paediatrician. Pulpectomies were done in the teeth with dislodged restorations followed by stainless steel crowns. Incision and drainage was done for the abscessed tooth with 0.1% chlorhexidine irrigation. Pit and fissure sealants were placed in the primary 2nd molars. Composite restorations were done in the incisors. Parents were emphasized on regular dental checkups and also about maintenance of oral hygiene.

Discussion

Oral health is an important aspect of health for all children, and more so for the children with special care needs, where prevention is more advantageous as treatment often incurs high cost and more risky than usual [5]. Children with autism are often cited as having certain behavioral factors which may lead to an increased risk for caries like medications causing xerostomia, dietary choice (preference or soft/sweet foods) and poor maintenance of oral hygiene. This will apparently lead to the increased risk for dental caries, which is more prevalent in children of 7 years or younger due to unknown reasons [6].

American Academy of Pediatric Dentistry's guideline on Caries Risk Assessment have categorised them under High risk for physicians and other non-dental health care providers and Moderate risk for dental providers [7]. Attitude and knowledge of the oral health care professionals is of utmost importance while rendering the oral health care to such children [8]. The treatment rendered currently provides a short term benefit for the patient. More focus had to be given for long term maintenance of oral health in special children for long term results.

Keeping in mind the importance of prevention, a vigorous approach to preventive measures such as oral hygiene practices, dietary advice and fluoride supplements are required. Dentists should take the responsibility and offer their services in prevention of dental disease in children with special health care needs by establishing communication with the authorities responsible for welfare of these individuals and involve themselves in the total health care [9]. Involuntary hand and arm movements or may be partially paralyzed extremities makes caregiver to take responsibility for maintenance of oral hygiene. Caregivers may experience higher levels of stress, which could exacerbate the preceding factors that contribute to poor oral health [10]. Therefore, communication should also be established with the parents/care takers of these individuals, and assistance offered in preventive efforts [11]. Brushing with a fluoridated dentifrice twice daily should be emphasized to help prevent caries and gingivitis. A non-cariogenic diet should be discussed for long term prevention and if a diet rich in carbohydrates is medically necessary, the dentist should provide strategies to alter frequency besides increasing preventive measures [12].

Management of dental diseases in children with special health care needs should be aimed at both short and long term treatment options. Short term treatment options are focused to control the disease progression and long term options are advised and taught to parents for preventing the recurrence of the disease.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

Bibliography

1. American Academy of Pediatric Dentistry. "Guidelines on management of dental patients with special health care needs". *Reference Manual* 37.6 (2016): 166-171.
2. Hennequin M., et al. "Accuracy of estimation of dental treatment need in special care patients". *Journal of Dentistry* 28.2 (2000): 131-136.
3. Klein U and Nowak AJ. "Autistic disorder: A Review for the pediatric dentist". *Pediatric Dentistry* 20.5 (1998): 312-317.
4. Thirumuru Akhila and Ditto Sharmin D. "Dental Management and Behavioural Modifications of Children with Autism Spectrum Disorders (ASD)". *EC Dental Science* 1.2 (2015): 33-55.
5. Valerie L and Carter Wagner E. "Health care provided for children with special care needs". (2012).
6. Rekha VC., et al. "Oral health status of children with autistic disorder in Chennai". *European Archives of Paediatric Dentistry* 13.3 (2012): 126-131.
7. American Academy of Pediatric Dentistry. "Guideline on Caries-risk Assessment and Management for Infants, Children, and Adolescents". *Reference Manual* 37.6 (2016): 132-139.
8. Jitender Solanki., et al. "Oral Rehabilitation and Management of Mentally Retarded". *Journal of Clinical and Diagnostic Research* 9.1 (2015): ZE01-ZE06.
9. Amjad H Wyne. "Dental Management of Mentally Retarded Patients". *Pakistan Oral and Dental Journal* 22 (2002): 3-8.
10. Chi DL., et al. "Caregiver burden and preventive dental care use for US children with special health care needs: a stratified analysis based on functional limitation". *Maternal and Child Health Journal* 18.4 (2014): 882-890.
11. Martens L., et al. "Oral hygiene in 12-year-old disabled children in Flanders, Belgium related to manual dexterity". *Community Dentistry and Oral Epidemiology* 28.1 (2000): 73-80.
12. American Academy of Pediatric Dentistry. "Policy on dietary recommendations for infants, children, and adolescents". *Pediatric Dentistry* 34 (2012): 56-58.

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