23rd American World Dentistry Congress

November 02-03, 2018 | San Francisco, USA

Assessment of dental caries and eruption of primary teeth in children with protein energy malnutrition

Sakshi Malik

Daswani Dental College and Hospital Kota, India

Tutrition is a basic human need and adequate wholesome diet is essential for the proper growth and development of human body. Prolonged nutritional deficits lead to chronic malnutrition in children. Malnutrition, with its two constituents of protein-energy malnutrition and micronutrient deficiencies, continues to be a major health burden in developing countries, especially in Asia and Africa. PEM, while generally considered a health problem in developing countries, is not rare in developed countries. According to the reports by the United Nations in 2008, around 923 million people worldwide are suffering from malnutrition. Malnutrition has severe effects on the growth and differentiation of different tissues. Even oral tissues, including the teeth, are very sensitive to the changes in the nutritional supply at these particular developing stages, thus increasing the ill effects on the oral structures. The present study seeks to bring out the association of early childhood malnutrition with dental caries and altered eruption timing as a potential explanatory variable in the relationship between PEM and dental caries. The data was collected on the basis of the examination conducted on 200 children under 5 years of age with protein energy malnutrition in rural areas of Udaipur district. Nutritional status assessment was done by a Pediatrician looking for the signs of malnutrition: eye, pitting oedema and appearance. Anthropometric measures were taken according to WHO criteria. These measurements included: upper arm circumference, weight, age and length/height of the child. This data was converted into weight for age, height for age, weight for height and arm circumference for age and compared with the WHO standard charts for protein energy malnutrition patients. Blood samples were collected from each child to determine total protein level, serum albumin and serum globulin levels after obtaining the consent from the parents. Questionnaires detailing information on child related factors like age at commencement of weaning, immunization coverage and number of diarrhoea episodes, etc. were administered. The oral health status of these children was assessed according to the WHO - Oral Health Survey Protocol. Assessment for the following was carried out: Caries and delayed eruption. Statistical analysis was done using SPSS version 20. Chi square test, Students t- test and Pearsons correlation were employed. The result showed that majority of study population was in <-3 SD and below, which signifies severe form of malnutrition. Caries were found in very few children, only 10% of the study population showed carious teeth. Delayed eruption was found in a large number of children that constituted almost 45% of the study population.

Biography

Sakshi Malik did her graduation in dental surgery in 2011 and post-graduation in 2015 from Rajasthan University of Health Sciences, Jaipur. She has done her MDS in Pediatrics and Preventive Dentistry and thereafter, she has worked as Senior Resident, Department of Dentistry, Government Medical College and Hospital, Udaipur from 2015 to 2018. Currently she is working as Senior Lecturer in Daswani Dental College and Hospital, Kota and simultaneously is into practice at her own private clinic. Interested in research, Dr. Malik has presented research papers in National and International Conferences both in India and abroad and has a number of published papers to her credit in indexed journals. As a part of social responsibility, she has been organising oral health camps in schools to create awareness among children.

malikrs2002@yahoo.co.in

Notes: