Abstract

Background: Previous study revealed that the link between dental caries and obesity has been controversial. The purpose of this research is to investigate the association between dental caries and obesity among primary school children in Wannan area, China. Methods: A cross-sectional study was designed to collect the routine health screening data for primary school children aged 5-14 years in Wannan area, China. Overweight and obesity status were determined using the International Obesity Task Force standard (IOTF) BMI cut-off points. Caries status was recorded based on WHO recommendations. Results: Our results revealed that the overall caries prevalence of the subjects was 44.9%. Maximum number of caries affected children belonged to underweight and normal group, followed by overweight, and the least number was obesity. These differences were statistically significant (chi-square test, P < 0.001). Children with obesity were 1.908 times (OR = 1.908; CI95% = 1.750, 2.079) more likely to have caries than children with underweight or health weight. Overweight children were 1.547 times (OR = 1.547; CI95% = 1.479, 1.618) more likely to have caries than children with underweight or health weight. After adjusted the gender and age, a statistically significant association was also observed between body mass index categories and caries. Conclusions: Obesity may have a significant effect on caries prevalence of primary school children in Wannan area, China. The importance of obesity should not only be emphasized with respect to general diseases but also with regard to carious lesions.

Keywords