

Obesity and periodontal disease in young, middle-aged, and older adults.

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BACKGROUND :The growing prevalence of increased body weight and obesity in the United States has raised significant public health concerns .Obesity has been implicated as a risk factor for several chronic health conditions, as well as being associated with increased mortality .Recently, an association between obesity and periodontal disease was found in a Japanese population .The purpose of the present study is to examine the relation between body weight and periodontal disease in a representative United States sample .**METHODS:** Participants in the third National Health and Nutrition Examination Survey (NHANES III (who were $>$ or $=$ 18 years and had undergone a periodontal examination were selected for the analysis)n =13,665 .(Body mass index)BMI (and waist circumference)WC (were used as measures of overall and abdominal fat content, respectively .Univariable and multivariable logistic regression models were used to estimate the association between increased body weight and periodontal disease .BMI and WC were assessed independently in a multivariable logistic model containing the following variables :gender, race, education, poverty index, smoking, diabetes, and time elapsed since last dental visit .Significant interactions with age were found and analyses were then stratified by age: younger)18 to 34 years old(, middle-aged)35 to 59 years old(, and older)60 to 90 years old (adults .**RESULTS :**A significant association between the measures of body fat and periodontal disease was found among the younger adults, but not middle or older adults .The adjusted odds ratios)OR (for having periodontal disease were 0.21)0.080 to 0.565(, 1.00)0.705 to 1.407(, and 1.76)1.187 to 2.612 (for subjects with BMI $<$ 18.5 kg/m², 25-29.9 kg/m², and $>$ or $=$ 30 kg/m², respectively .Young subjects with high WC had an adjusted OR of 2.27)1.480 to 3.487 (for having periodontal disease .**CONCLUSIONS :**In a younger population, overall and abdominal obesity are associated with increased prevalence of periodontal disease, while underweight)BMI $<$ 18.5 (is associated with decreased prevalence .Obesity could be a potential risk factor for periodontal disease especially among younger individuals .Promotion of healthy nutrition and adequate physical activity may be additional factors to prevent or halt the rate of progression of periodontal disease.

PMID :12816292]PubMed -indexed for MEDLINE[