Overweight and obesity impact on periodontitis: A Brazilian birth cohort

23 June 2016

Today at the 94th General Session & Exhibition of the International Association for Dental Research, researcher Marco Peres, The University of Adelaide, South Australia, will present a study titled "Overweight and Obesity Impact on Periodontitis: A Brazilian Birth Cohort." The IADR General Session is being held in conjunction with the 3rd Meeting of the IADR Asia Pacific Region and the 35th Annual Meeting of the IADR Korean Division.

Overweight and obesity have been associated with increased periodontitis risk. However, uncertainty persists regarding the causal relationship of such conditions. In this study, participants were followed periodically since their birth. Anthropometric measures and habits were assessed during the life-course. Periodontal examinations comprised a full-mouth probing at six sites per tooth using a PCP2 probe.

Two different periodontal disease criteria were adopted for this study: i) American Academy of Periodontology and the Center for Diseases Control and Prevention (AAP/CDC); ii) Baelum and Lopez (Combination of Clinical Attachment Loss_CAL_ and Bleeding on Probing_BOP). Hypothetical conditions were set independently to each risk factor and in joint interventions with overweight and obesity on the entire population. Researchers performed the parametric g-formula to estimate the 31-year periodontitis risk considering life-course obesity and overweight in association with other habits.

In this study, 539 participants aged 31 years had periodontal examinations in 2013. The 31-year risk under no intervention was 33.3%, 14.3% and 14.7% for any periodontitis, moderate/severe periodontitis and BOP+CAL, respectively. Overweight and obesity increased the risk of all outcomes: 11% (overweight) and 22% (obesity) higher risk of periodontitis; 12% (overweight) and 27% (obesity) greater risk of moderate and severe periodontitis; 21% (overweight) and 57% (obesity) higher risk of CAL+BOP. When combined with other unhealthy habits, the risk was even greater.

The research results determined that life-course overweight and obesity increased the risk for unfavorable periodontal outcomes in this population. This effect was greater when combining excess of weight and unhealthy habits, suggesting a cluster effect.

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More information: This is a summary of abstract #0210 titled "Overweight and Obesity Impact on Periodontitis: A Brazilian Birth Cohort," to be presented by Marco Peres on Thursday, June 23, 2016, 8:30 a.m. - 8:45 a.m. at the COEX Convention and Exhibition Center, in room 210, as part of the session titled "Systemic Conditions & Periodontal Disease Epidemiology I."

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