2879 Association between Prevalence of Root Caries and Coronary Heart Disease

S.M. MAURIELLO, K.L. MOSS, and J.D. BECK, University of North Carolina, Chapel Hill, USA

Previous studies have reported associations between root caries and mortality due to heart disease in older adults. However, those studies were not designed to assess cardiovascular outcomes. Objectives: The purpose of this study was to describe root caries prevalence in the Atherosclerosis Risk in Communities (ARIC) study and determine if an association existed between root caries and prevalent coronary heart disease (CHD) in the study population.

Methods: From 1996-99, dental examinations were conducted on a sample of 6446 subjects, aged 52-74. Root caries were assessed using Radike criteria by calibrated examiners in four US communities. The exposure was defined as the presence or absence of root caries lesions. The outcome variable was defined as reported/detected cases of CHD. Data were analyzed using bivariate and multivariable logistic regression analyses. Age, sex, and race in ARIC field centers were designated control variables. Covariates included body mass index (BMI), diabetes, hypertension, low density lipids (LDL), high density lipids (HDL), triglycerides, smoking (never, current/former, light/heavy), income (high, med, low), and education (high, med, low). Results: Approximately 7% of the population had 1 or more active root caries lesions and 6% had prevalent CHD. In the bivariate analysis, CHD prevalence in the root caries group was 8.9% compared to 5.7% in those without root caries (p=0.005). In the logistic regression model, root caries was associated with CHD (OR=1.6; 1.1, 2.3), adjusting for race, age, sex, smoking status and intensity, hypertension, HDL, and LDL cholesterol. Conclusions: Root caries was associated with prevalent coronary heart disease and that relationship was independent of other study variables assessed. This finding is consistent with previous studies indicating that root caries may be a marker for mortality due to CHD. This research was supported by NIDCR Grant R01-DE11551 and multi-center contracts supported by NHLBI.

Seq #303 - Oral Health and Systemic Diseases
8:00 AM-9:30 AM, Saturday, 13 March 2004 Hawaii Convention Center 305-A

Back to the Geriatric Oral Research Program
Back to the IADR/AADR/CADR 82nd General Session (March 10-13, 2004)