Prevention

TOOTH LOSS IS INDEPENDENTLY ASSOCIATED WITH ADVERSE OUTCOME BUT NOT MYOCARDIAL INFARCTION IN PATIENTS WITH CHRONIC CORONARY HEART DISEASE

Poster Contributions
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Background: There is limited and contradictive information on the purported relationship between oral health and prognosis in patients with established coronary heart disease (CHD). The purpose of this analysis was to assess the potential association between self-reported tooth loss, a validated marker of periodontitis and oral disease, and outcomes in a large global cohort of chronic CHD patients.

Methods: At baseline, 15,456 patients with chronic CHD from 39 countries in the STabilisation of Atherosclerotic plaque By Initiation of darapLadlb TherapY (STABILITY) trial reported number of teeth according to the following levels: 26-32 (lowest tooth loss level), 20-25, 15-19, 1-14 and No Teeth (highest tooth loss level). In Cox proportional hazards models, associations between tooth loss levels and cardiovascular (CV) outcomes and all-cause death were investigated.

Results: A total of 3,310 (21%) patients reported having 26-32 teeth; 3,680 (24%) 20-25 teeth; 2,167 (14%) 15-19 teeth; 3,785 (24%) 1-14 teeth and 2,514 (16%) patients reported having no remaining teeth. Median follow-up time was 3.7 years. The Kaplan-Meier event rate estimate was 4.7% for CV death, 7.0% for all-cause death, 2.0% for non-fatal and fatal stroke and 5.0% for non-fatal and fatal myocardial infarction (MI). After multivariable adjustment for CV and socio-economic risk factors, every increase in tooth loss level was associated with an increased risk of CV death (HR 1.17 [95% CI 1.10-1.24], p<0.001), all-cause death (HR 1.16 [95% CI 1.11-1.22], p<0.001) and stroke (HR 1.14 [95% CI 1.04-1.24], p=0.007) but not with MI (HR 0.99 [95% CI 0.94-1.05], p=0.822).

Conclusion: In this large global cohort of chronic CHD patients, self-reported tooth loss predicted CV death, all-cause death and stroke in a linear fashion but was not associated with the risk of MI. The results suggest that tooth loss is a broad independent indicator of accumulated risk for adverse outcome in patients with established CHD, mediated through events other than MI.