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DIALYSIS. EPIDEMIOLOGY, OUTCOME RESEARCH, HEALTH SERVICES RESEARCH - 2

SP748 PERIODONTITIS AND EARLY MORTALITY IN ADULTS WITH KIDNEY FAILURE TREATED WITH HEMODIALYSIS: A MULTINATIONAL OBSERVATIONAL STUDY

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Introduction and Aims: Periodontitis is associated with cardiovascular mortality in the general population and adults with chronic diseases, however prognostic data for periodontitis in the setting of kidney failure are sparse. The aim of the study was to evaluate whether periodontitis was prognostic for all-cause and cardiovascular-related death in adults with kidney failure.
Methods: ORALD is a multinational cohort study in adults with kidney failure treated with haemodialysis in Europe (France, Hungary, Italy, Poland, Portugal and Spain) and Argentina. Periodontitis was measured at baseline according to the World Health Organization Community Periodontal Index. The outcomes were all-cause and cardiovascular mortality. Analyses were conducted using a fixed-effect Cox proportional hazards analysis and additionally using a random effects model fitted using shared frailty to account for clustering within countries.
Results: Periodontitis was evaluable in 3338 dentate participants of which 1355 (40.6%) had moderate to severe periodontitis. During 6150 person-years of follow-up, 650 deaths occurred of which 325 were cardiovascular. In multivariable analyses, moderate to severe periodontitis was associated with a lower hazard of all-cause (HR 0.76, 95% confidence interval 0.64 to 0.90) and cardiovascular (0.69, 0.54 to 0.87) mortality. There was evidence of decreasing mortality risks with more severe periodontal disease ($P \leq 0.001$ for trend). However, when analyses accounted for clustering of participants within countries, the associations between periodontitis and all-cause (0.92, 0.75 to 1.11) and cardiovascular (0.83, 0.63 to 1.09) mortality were not significant. Similar results were observed in analyses restricted to participants with 12 or more teeth and when competing risks for cardiovascular death were considered.
Conclusions: Unlike in the general population, there is limited evidence that periodontitis is independently associated with increased all-cause or cardiovascular mortality in adults with kidney failure.
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