Advanced tooth loss often indicates that a person has a history of inflammatory oral diseases. In an extensive cohort study, it was shown that tooth loss associate with future cardiovascular events, diabetes and death. The study was conducted in Finland at the University of Helsinki in collaboration with The National Institute for Health and Welfare (THL).

The number of missing teeth could be a useful additional indicator for general medical practitioners, when individual risk factors for chronic diseases are assessed, researcher John Liljestrand states.

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The National FINRISK 1997 Study is a Finnish population-based survey of 8,446 subjects, aged 25 – 75, who filled a comprehensive questionnaire and participated in clinical examinations. The number of missing teeth was recorded at a baseline and information on incident disease events and deaths was obtained via national registers in a 13 y follow-up.

More than five missing teeth increased the risk for coronary heart disease events and myocardial infarctions as much as 140 %. More than nine missing teeth indicated an increased risk for cardiovascular diseases (51 %), diabetes (31 %) and death (37 %). Corresponding risks for edentulous subjects were 40-68 %. Traditional risk factors were taken into account in the statistical analyses. Adding information on missing teeth to established risk factors improved the risk discrimination of death.

Noncommunicable diseases, such as cardiovascular diseases and diabetes, are the most common cause of death worldwide. They are known to associate with inflammatory oral diseases, such as periodontitis. Periodontitis is a chronic inflammatory disease in the tooth supporting tissues, which appears as gingival bleeding, increased tooth mobility and deepened periodontal pockets. It may result in the loss of teeth, if left untreated and it is also the most common cause of tooth loss in the middle aged and elderly.


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