

PREMATURE DEATHS: IS LONG-TERM PERIODONTITIS A SILENT KILLER?

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OBJECTIVES

Life expectancy continues to increase, and preventing premature deaths is of the essence. Recent studies have established a connection between low-grade inflammation and increased mortality. Yet the question remains, to what extent does long-term periodontitis contribute to a fatal outcome?

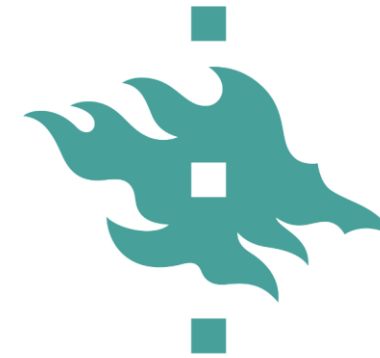
METHODS

The study comprises 1643 patients from the greater Stockholm area, Sweden, initially clinically examined in 1985.

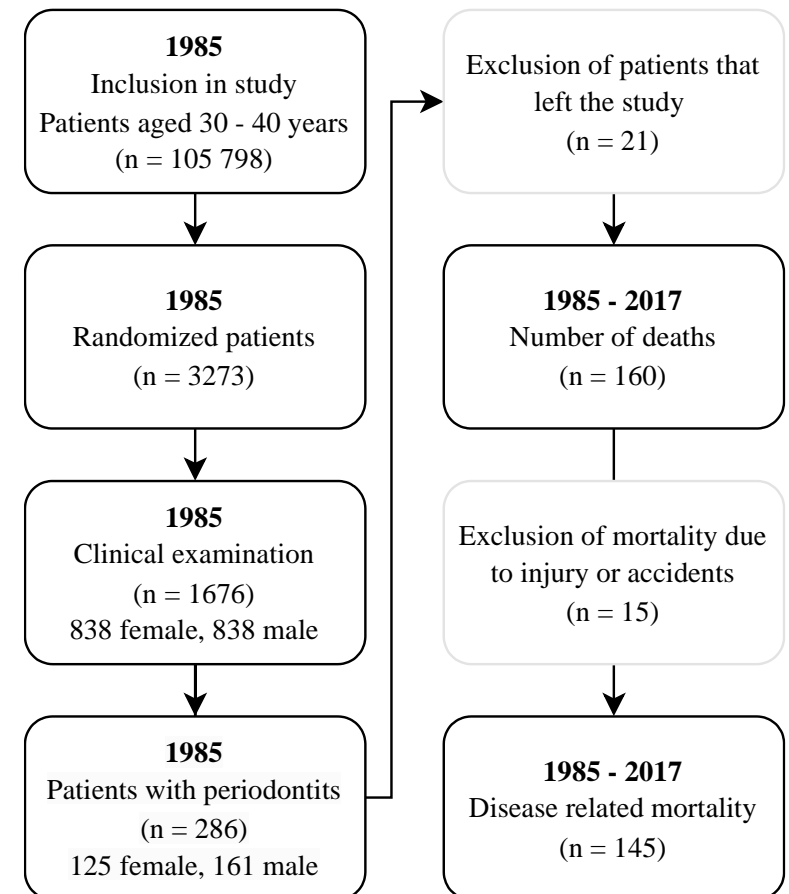
- Followed up by using Swedish national population and patient registers from 1985–2017.
- Analyses were conducted with patients diagnosed with periodontitis in 1985, periodontally healthy individuals and the cause of death.
- Descriptive statistics; t-tests were used to test the difference between groups, chi-square to test if the distribution differs from the expected, and logistic regression to evaluate associations between variables.

AIM

To investigate how long-time periodontitis affects life expectancy and mortality among our subjects.



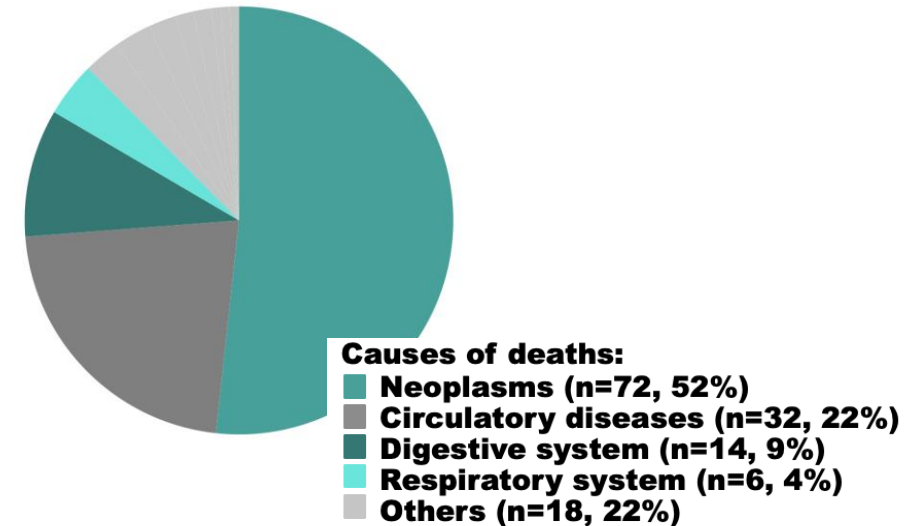
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RESULTS

In the years 1986–2017, disease-related mortality was significantly higher among the periodontitis patients 13.8% (n=39), compared to 7.8% (n=106) among the periodontally healthy (p=0.001).

- Periodontitis patients passed away significantly more due to neoplasms (7.8%; n=22), compared to non-periodontitis patients (3.9%; n=53) (p=0.004).
- A significant association was shown between periodontitis and mortality (p=0.013, OR 1.656 Cl: 1.110-2.470) and between periodontitis and mortality due to neoplasms (p=0.012, OR 1.955, Cl: 1.159-3.298), even when adjusted for covariates.
- A difference in mortality by cardiovascular diseases, however, could not be found between the periodontitis patients and those who were periodontally healthy in 1985.



DEATHS BY	NON-PERIO	PERIO	P-VALUE*
<u>All deaths</u>	106 (7.8%)	39 (13.8%)	0.001
<u>Neoplasms</u>	53 (3.9%)	22 (7.8%)	0.004
<u>Circulatory system</u>	27 (2.0%)	5 (1.8%)	
<u>Digestive system</u>	10 (0.7%)	4 (1.4%)	0.257
<u>Respiratory system</u>	3 (0.2%)	3 (1.1%)	0.033

CONCLUSION

In this study long-term periodontitis is linked to premature death and a higher mortality rate, particularly in cancer, compared to the periodontally healthy subjects. These results emphasize the importance of good oral health in systemic health.

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