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Literature Abstract

Cancer risk among gingivitis and periodontitis patients: A nationwide cohort study

This retrospective population-based study was conducted to evaluate the risk of cancer among patients with gingivitis and periodontitis. Data from the National Health Insurance (NHI) program in Taiwan was used in this study to randomly select 1 million patients from 1997 to 2010. All patients in this study were older than 20 years old. The study cohort consisted of patients newly diagnosed with periodontitis, and the comparison cohort consisted of patients newly diagnosed with gingivitis during this period. Both cohorts were followed until a malignant cancer diagnosis, lost to follow-up, death, termination of insurance, or the end of 2010. The multivariable Cox proportional-hazard regression model was used to assess the risk of developing cancer associated with periodontitis and gingivitis. The Kaplan-Meier analysis was used to show the probability of remaining cancer free, and a log-rank test was used to evaluate differences between the two cohorts ($P < .05$). The incidence rate of cancer was found to be 1.14 times higher in patients with periodontitis than in patients with gingivitis (confidence interval [CI] = 1.11–1.17). Multivariate analysis showed that patients with periodontitis have a higher risk of developing oral cancer (95% CI = 1.42–2.25). The Kaplan-Meier analysis showed a significantly lower oral cancer-free rate in the periodontitis cohort than in the gingivitis cohort (log-rank $P < .0001$). In conclusion, the results of this study indicated an increased risk of developing oral cancer in patients with periodontitis. However, large-scale prospective studies will be required to confirm these findings.

Wen BW, Tsai CS, Lin CL, et al. *QJM* 2014;107:283–290. **References:** 30. **Reprints:** CH Kao, Graduate Institute of Clinical Medicine Science and School of Medicine, College of Medicine, China Medical University, No. 2, Yuh-Der Road, Taichung 404, Taiwan. Email: d10040@mail.cmu.org.tw —Teo Juin Wei, Singapore

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