

## **A Nationwide Population-Based Study on the Association between Chronic Periodontitis and Erectile Dysfunction**

**Introduction and Objective:** To explore the association between chronic periodontitis and erectile dysfunction by using a nationwide, population-based dataset with a retrospective case-control design in Taiwan.

**Material and Methods:** We identified 32,856 patients with erectile dysfunction as cases and randomly selected 162,480 as controls. Conditional logistic regression analyses were performed to investigate the association between erectile dysfunction and having previously diagnosed with chronic periodontitis.

**Results:** Of the sampled patients 24,294 (12.3%) had been diagnosed with chronic periodontitis prior to the index date; 8,825 individuals (26.9% of the patient with erectile dysfunction) were cases and 15,469 (9.4% of patients in the comparison cohort) were controls. After adjusting for the patient's monthly income, age, geographic location, hypertension, diabetes, hyperlipidemia, coronary heart disease, obesity, and alcohol abuse, patients with erectile dysfunction were more likely to have been diagnosed with chronic periodontitis prior to the index date than controls (OR=3.35, 95% CI=3.25-3.45,  $p<0.001$ ). In addition, the association was much stronger among the younger population aged less than 30 years (OR=4.54, 95% CI=3.81-5.40) and the elder group aged more than 69 years (OR=4.84, 95% CI=4.35-5.39).

**Conclusions:** Our study demonstrated an association between erectile dysfunction and having been previously diagnosed with chronic periodontitis.