

Caries experience and selected caries-risk factors among a group of adult diabetics

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Abstract

OBJECTIVES: To investigate the prevalence of dental caries and selected caries-risk factors among a group of adult diabetics and to determine the impact of sociodemographic, medical history, caries risk factors and oral health behaviors on caries experience. **SUBJECTS and METHODS:** A case-control study was conducted on 150 adult diabetics (Type 1= 49, Type 2= 101) and 50 healthy, sex and age-group matched controls. The data were gathered by questionnaire, clinical examination and laboratory investigations. **RESULTS:** The diabetics' coronal caries experience based on the DMFT scores was not statistically different from that of non-diabetics. However, by excluding the contribution of missing teeth from the coronal DMF index, the result showed lower diabetics' caries experience due to a lower number of filled teeth ($P < .001$). The prevalence of diabetics' current root caries (DT scores) was statistically significantly higher than that of non-diabetics, although there were no statistical significant differences in the root DMFT values between the groups. The diabetics showed significantly higher buffer capacity and lactobacilli counts but similar salivary flow rates and mutans streptococci counts in comparison to controls. The overall results indicated no significant statistical differences in the prevalence of dental caries or caries-risk factors between Type 1 and Type 2 diabetics. Factors contributing to higher caries experiences among the groups were plausible with current information on caries risk, e.g., high mutans streptococci counts, lower buffer capacity and less brushing frequency. **CONCLUSION:** The presence of dental caries is not significantly elevated in most diabetics but a certain subpopulation may be at risk, especially for root caries.