

SYNERGISM BETWEEN OBESITY AND POOR ORAL HEALTH ASSOCIATED WITH DIABETES IN AN ELDERLY HUMAN POPULATION

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Abstract. We investigated associations between type 2 diabetes (DM) and several variables, including poor oral health and overweight/obesity, among a group of elderly Hmong subjects (60 years and older) who emigrated to the United States following the Vietnam conflict. Each subject was interviewed and their weight, height and waist circumference were measured. Each subject had an oral health examination. Each subject's saliva was analyzed for seven components related to inflammation. The presence of DM was correlated with poor oral health (POH) and overweight/obesity (OW) separately. There was a strong correlation between concurrent POH and OW and the presence of DM: all subjects with both POH and OW had DM. Logistic multivariate analysis of OW, POH, age, years of residence in California, and stress level revealed a significant association between the presence of DM and concurrent OW and POH. A change in diet after immigration was excluded as an explanatory variable. Subjects with DM and concurrent OW and POH had significantly elevated salivary levels of five analytes related to chronic inflammation. The association between POH and OW and the presence of DM needs further study.

Keywords: oral health, obesity, type 2 diabetes, elderly population

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