

## **Hyposalivation, xerostomia and oral candidiasis in a group of HIV-infected patients in Thailand**

### **Abstract**

The purpose of this study was to assess the salivary flow rate and xerostomia in HIV and HIV free subjects with a well-controlled consumption of medications. It also aims to correlate salivary flow rate and the stage of HIV infection, colony forming units of *Candida* and the presence of oral candidiasis. A cross-sectional study was performed in the two different regions of Thailand; in the north and in the south. One hundred and thirty-five subjects were enrolled (56 HIV-seropositive, mean age: 34.5 years and 79 HIV-seronegative individuals, mean age: 29.5 years) were enrolled. A measurement of saliva flow rate comprised both unstimulated and wax-stimulated whole saliva using the draining method. The effect of HIV serostatus, stage of HIV infection: asymptomatic, symptomatic, AIDS, and medications on the flow rates were analyzed. The unstimulated flow rates in the HIV+ and HIV- group were 0.19 and 0.23 (P~0.35). For stimulated flow rates the corresponding figures were 1.47 and 1.57 (P~0.60). With respect to stage of HIV infection the unstimulated flow rate was significantly higher in the asymptomatic group: 0.32, when compared to the symptomatic and AIDS group 0.13 and 0.16 respectively (P<0.05). No significant difference between the groups could be found with respect to stimulated flow rate. In the same order the mean values were 1.66, 1.36 and 1.45. With respect to medication, no significant difference could be demonstrated between the groups of subjects with or without xerostomia-inducing drugs neither regarding unstimulated or stimulated flow rates. For unstimulated saliva the values were 0.20 and 0.28 and for stimulated saliva 1.74 and 1.56. It was found that the following factors were significantly associated

with hyposalivation; sex, stage of HIV infection, risk group, systemic disease, smoking habit, and alcohol consumption. Hyposalivation was not found to be significant associated with the presence of oral candidiasis, colony forming unit of *Candida*, and the presence of cervical/root caries. This study indicated that there are only minor changes in salivary flow rate among HIV-infected individuals with respect to medication.

**Key words:** AIDS, HIV, hyposalivation, oral candidiasis, medication, Thailand, xerostomia