
Association of Dental Health Parameters with Oral Lesion Prevalence in HIV-infected Children. J-W Chen*, CM Flaitz, B Wullbrandt, J Sexton. University of Texas Health Science Center Dental Branch, Houston, TX.

Oral lesions, salivary gland dysfunction, and dental caries are more common in HIV-infected children than in the general pediatric population. The relationship among these oral conditions has not been studied thoroughly in HIV-infected children. This study assessed the association of caries, plaque and gingival health and antiretroviral medication use with oral lesion prevalence in HIV-infected Romanian children. A total of 104 HIV-infected children (mean age=11.7 yrs), who were treated consecutively in 2 municipal Romanian hospitals, were evaluated for oral lesions, caries (dfs+DFS/total teeth present), plaque accumulation (Silness & Loe), and gingival health (Loe & Silness). HIV-associated oral lesions were broadly grouped as: 1) extraoral herpetic infections; 2) parotid gland swelling; 3) ulcerative lesions, including necrotizing periodontal diseases; and 4) fungal infections, including linear gingival erythema. A single, standardized operator performed the examinations and photographed the oral lesions. Data were analyzed by logistic and multiple regression, and Pearson correlation. For each single point gingival index increase, there was a 7.6 times likelihood that fungal infection would be present ($p=0.01$; $OR=7.6$). Increased caries experience was independently associated with a 2.5 times likelihood that fungal infection would be detected ($p=0.002$; $OR=2.5$). Ulcerative lesions and extraoral herpetic infections were not independently associated with increased caries, plaque or gingival indices. Caries experience, plaque and gingival indices were associated with an increased number of oral lesions ($r=0.472$, $p<0.001$, Pearson correlation). Antiretroviral medication use was associated with decreased caries ($p=0.001$, t-test), but was not associated with decreased oral lesion prevalence. In HIV-infected children, caries prevention and maintenance of gingival health are important in reducing fungal infections. Oral lesions are more numerous in those children with higher caries experience, gingival inflammation and plaque accumulation. In children with limited access to medical care, the role of oral health appears to be important for preventing common opportunistic infections. (Sponsored in part by World Vision)