

**Occurrence of oral lesions associated with HIV/AIDS in patients receiving HAART at
the comprehensive care clinic, Thika District Hospital, Kenya**

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ABSTRACT

The prevalence of some easily detectable oral manifestations of HIV/AIDS decreases with HAART. Their presence may therefore be used as an indicator of the effectiveness of HAART. The objective of this study was to determine the occurrence and patterns of HIV/AIDS-related oral lesions in relationship to HAART usage, with a particular focus on oro-pharyngeal candidiasis (OPC).

In this cross-sectional study, every 5th HIV-positive Comprehensive Care Clinic (CCC) outpatient on HAART was selected. They underwent oral cavity examination for the presence of different clinical forms of OPC and other oral lesions associated with HIV infection. Individual patient medical records were perused for relevant clinical data. Gram Stain smears from OPC lesions were examined under a light microscope for the presence of *Candida* pseudo-hyphae. Data was recorded in structured questionnaires and standard forms, entered into MS Access and then transferred to Statistical Package for Social Sciences (SPSS) for analysis. Chi square was used to analyze the statistical significances of the differences in frequencies and proportions. The data was stratified for periods below and above 24 weeks on HAART. One-way ANOVA was computed comparing the mean ages, mean CD4 count and mean durations on HAART between the sexes. Odds ratios were calculated for the occurrence of OPC in subjects who had been on HAART for 24 weeks or more with adjustments for age, CD4 count, use of antifungal drugs, use of antibiotics and missed HAART doses marital status and employment status.

A total of 404 (63% female) patients were examined. Male: female ratio was 1:1.7. The mean age was 39.8 ± 9.5 years. All the patients examined were on triple HAART therapy. Patients who had been on HAART for less than 24 weeks were 69 (17.1%) while 335 (82.9%) had been on HAART for more than 24 weeks. Oral lesions were observed in 63 (16%) patients. OPC was the commonest (12%), followed by oral hairy leukoplakia (3%). Erythematous candidiasis was the most predominant type of oral candidiasis (6%) followed by pseudo-membranous candidiasis (5%) and angular cheilitis (1%). There was no statistically significant difference in occurrence or type of oral lesions observed between those patients who had been on HAART for more or less than 24 weeks ($p = 0.12$).

Compliance to HAART by the study subjects is satisfactory. The occurrence of oral cavity lesions of HIV/AIDS in patients on HAART at Thika District Hospital is low and shows a gradual decrease over time with HAART usage. Clinicians attending to persons with HIV/AIDS should be capable of diagnosing the oral lesions associated with HIV/AIDS and may use these lesions as pointers for confirming the immune status of the patients using the appropriate laboratory testing. Oral health clinicians should routinely examine for oral opportunistic and neoplastic diseases in patients with HIV/AIDS and offer appropriate treatment to improve the quality of life of these patients. The rate of occurrence recorded in this study may be generalized to populations of persons who know and have accepted their HIV status and are on HAART. More studies, preferably longitudinal, need to be conducted for reasonable periods of time in order to get a better picture on the patterns of occurrence of oral lesions in adults on HAART in Kenya.