THE ROLE OF HUMAN PAPILLOMAVIRUS INFECTION AND HIGHLY ACTIVE ANTI-RETROVIRAL THERAPY IN HIV INFECTED WOMEN

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Background: Cervical cancer continues to have a devastating impact on women’s health. Persistent infection with high-risk types of human papillomavirus is the necessary cause of cervical cancer. HIV infection is associated with higher rates of HPV infection and cervical cancer.

Aim: To assess the prevalence of high-risk human papillomavirus in HIV infected women and assess the development of cervical neoplasia and the effect of highly active anti-retroviral therapy on this process.

Setting: The gynaecology clinics at the Steve Biko Academic Hospital and Kalafong Hospital and the HIV clinic at Tshwane District Hospital, Pretoria, South Africa.

Method: Longitudinal descriptive study. Patient selection included women attending the gynaecology clinics at Steve Biko Academic Hospital, Kalafong Hospital and the HIV clinic at Tshwane District Hospital. Women were interviewed after which they underwent a gynaecological examination with collection of specimens for cervical cytology and histology and HPV genotyping. Data entry and analysis was done using “Stata for Windows”.

Results: Of the 181 women recruited, 93.9% were HR HPV positive with multiple types of HR HPV. Type 16 was the most prevalent HPV type. Cytology had a sensitivity of 66% for CIN and a specificity of 84% while HR HPV testing had a sensitivity of 99.1% and a specificity of only 15.1%.

Conclusion: HR HPV is prevalent in HIV-infected women with type 16, 51 and 58 being the most prevalent. HPV testing had high sensitivity but low specificity. HAART did not make a difference in the development and progression of CIN.