TITLE: PREVALENCE AND EPIDEMIOLOGY OF HUMAN PAPILLOMAVIRUS (HPV) INFECTION IN HUMAN IMMUNODEFICIENCY VIRUS (HIV)-1-POSITIVE WOMEN FROM THE NORTH REGION OF BRAZIL

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ABSTRACT:

Several studies have shown a higher prevalence of HPV infection in HIV-infected patients, as well as association of that infection with occurrence of cancer precursor lesions of the cervix . The persistence of HPV infection in HIV-infected women seems to be related to the levels of $CD4^+/CD8^-$, HIV-1 viral load and occurrence of polymorphisms in cytokine genes. Thus, this study aimed to determine the prevalence of HPV infection in HIV-infected women. From April 2010 to December 2012 cervical specimens were collected from 184 women with HIV-1 who underwent of PCCU in UREDIPE, being, only 169 eligible for the study. Form each participant were collected two cervical samples, one for cytological analysis and other for molecular biology analysis. The HPV survey was conducted by nested PCR technique, using primers MY09/11 and GP5+/6. HPV type was defined by using the commercial kit *LINEAR ARRAY HPV Test Genotyping*. The mean age of the women in the study was 36.6 years of age, with a minimum age of 19 and a maximum of 66 years. The prevalence of HPV infection was 63,3 %. HPV-16 was detected in 40,4 % of cases, followed by HPV-52 (12.8%). HPV infection was predominant in the group of women without cytological abnormality and more prevalent in women of reproductive age, unmarried, low education level and who used condoms during sexual intercourse. It was observed an association between HPV infection and independent variables, such as condom use, multiple sexual partners and history of STIs. The high prevalence of HPV found in the study corroborates other findings in the literature. The prevalence of infection in women without cytological abnormality reinforces the idea that the infection is mostly asymptomatic. In this study, genetic polymorphisms were not associated with HPV infection nor with intraepithelial lesions.

Keywords: HPV, HIV, Cervical cancer, sexually transmitted disease, epidemiology.