



Scientists and Health Care Workers  
Committed to HIV/AIDS

# 16th International AIDS Conference

Toronto, Canada - August 13 - 18, 2006

## PREVALENCE AND PREDICTORS OF SQUAMOUS INTRAEPITHELIAL LESIONS OF THE CERVIX IN HIV-INFECTED WOMEN IN LUSAKA, ZAMBIA

*Int Conf AIDS. 2006 Aug 13-18;16 Abstract No. TuAb0303*

G. Parham<sup>1</sup>, V. Sahasrabudde<sup>2</sup>, S. Vermund<sup>2</sup>, B. Shepherd<sup>2</sup>, E. Stringer<sup>1</sup>, M. Mwanahamuntu<sup>3</sup>

<sup>1</sup> UAB/Center for Infectious Disease Research in Zambia, Lusaka, Zambia, <sup>2</sup> Vanderbilt University, Nashville, United States, <sup>3</sup> University Teaching Hospital, Lusaka, Zambia

---

**BACKGROUND:** HIV-infected women are at higher risk for the development of HPV-induced squamous intraepithelial lesions (SIL) of the cervix. HIV-infected women living in resource limited settings like Zambia are now accessing antiretroviral therapy and may live long enough for cervical cancer to manifest and progress. It is important to develop appropriate guidelines for screening in the context of cervical cancer prevention.

**METHODS:** We evaluated the prevalence and predictors of cervical cytological abnormalities among 150 consecutive, eligible, nonpregnant HIV-infected women accessing HIV-care services in Lusaka, Zambia. A pelvic examination was performed and cervical specimens were analyzed with liquid-based monolayer cytology (Thin Prep Pap Test®: Cytoc Corporation) and testing for HPV using Roche Linear Array® PCR assay.

**RESULTS:** The median age of study participants was 36 years (range 23 – 49 years) and their mean CD4+ count was 209/ $\mu$ l (S.E. +14.7). The prevalence of SIL was 76% (114/150); 23.3% (35/150) women had low grade SIL, 32.6% (49/150) had high-grade SIL, and 20% (30/150) had lesions suspicious for squamous cell carcinoma (SCC). High-risk HPV types were present in 85.3% (128/150) women. On bivariable analyses, age, CD4+ cell count and presence of any high-risk HPV type were found to be significantly associated with the presence of severely abnormal cytology, i.e., high grade SIL and suspicious for squamous cancer. Multivariable logistic regression modeling suggested the presence of any high-risk HPV type as an independent predictor of severely abnormal cytology (Adjusted OR: 12.4, 95% C.I. 2.62 – 58.1,  $p=0.02$ ).

**CONCLUSIONS:** The high prevalence of abnormal squamous cytology in our study is one of the highest reported in any population worldwide. It is essential to develop, implement, and evaluate cost-effective screening tests and appropriate treatment protocols for HIV-infected women in resource limited settings who, on antiretroviral therapy, may live long enough to develop HPV-induced invasive cervical cancer.

2006-08-13  
TuAb0303

---

Copyright © 2006 - [International AIDS Society](#) (IAS). All information and content relating to the abstracts from the 16th International AIDS Conference, such as text, graphics, logos, button icons, images, audio clips, and software is protected by copyright. Permission is hereby granted for the non-commercial use or reproduction of the information on this web site, provided that the use of such information is accompanied by an acknowledgement that IAS is the source of the information and the name of the author of the article.

AEGiS is a 501c(3) not-for-profit organization made possible through unrestricted grants from [Boehringer Ingelheim](#), [Bridgestone/Firestone Charitable Trust](#), [Bristol-Myers Squibb Company](#), [Elton John AIDS Foundation](#), [GlaxoSmithKline](#), the [National Library of Medicine](#), [Roche / Trimeris](#), and [donations](#) from users like you. *Always watch for outdated information. This article first appeared in 2006. This material is designed to support, not replace, the relationship that exists between you and your doctor.*

AEGiS presents published material, reprinted with permission and neither endorses nor opposes any material. All information contained on this website, including information relating to health conditions, products, and treatments, is for informational purposes only. It is often presented in summary or aggregate form. It is not meant to be a substitute for the advice provided by your own physician or other medical professionals. *Always discuss treatment options with a doctor who specializes in treating HIV.*

Copyright ©1980, 2006. AEGiS. All materials appearing on AEGiS are protected by copyright as a collective work or compilation under U.S. copyright and other laws and are the property of AEGiS, or the party credited as the provider of the content. Permission is hereby granted for the non-commercial use or reproduction of the information herein, provided that the use of such information is accompanied by an acknowledgement that IAS is the source of the information and the name of the author of the article.