Objective

Women infected with human immunodeficiency virus (HIV) have a higher risk of HPV infections and developing cervical cancer, thus screening them is imperative. This study was aimed to evaluate and compare the performance of 3 cervical cancer screening options among HIV-infected women in Uganda.

Materials and Methods

Data from 2,337 Ugandan women who reported their HIV status were obtained from a population-based cervical cancer screening study. Women were offered 3 screening tests: vaginal and cervical *care*HPV and visual inspection with acetic acid (VIA), and the results were evaluated by HIV status.

Results

The prevalence of HIV infection was 16.5%. Women infected with HIV had a higher prevalence of cervical intraepithelial neoplasia grade 2+ (CIN2+) than uninfected women (12.9% vs 1.7%; $p < .001$). The sensitivity for cervical *care*HPV among the HIV-infected women was 94.3% compared to 81.3% among the uninfected women. Whereas the sensitivity for vaginal *care*HPV was also higher among the HIV-infected women, the sensitivity of VIA was higher among the uninfected women. The mean vaginal and cervical *care*HPV signal strength was higher in the HIV-infected women than in the uninfected women ($p < .001$).

Conclusions

*Care*HPV is very sensitive for detecting CIN2+ in HIV-infected women, even using a vaginal sample. The sensitivity of *care*HPV in HIV-infected women is higher than in HIV-uninfected women. However, additional research is needed to determine the best option for screening and triage of HPV-positive women that can be implemented in low-resource settings, especially among HIV- and HPV-positive women.

*Care*HPV, a new human papillomavirus DNA screening test, is a very sensitive cervical screening method for detecting cervical intraepithelial neoplasia grade 2+ in human immunodeficiency virus–infected women.