HPV Vaccine May Leave HIV-Positive Women Vulnerable to High-Risk Strains

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The current vaccines for the human papillomavirus (HPV) do not include protection against high-risk strains that immune-compromised women, including those with uncontrolled HIV, may acquire. Researchers from Fox Chase Cancer Center presented the findings of their study at the American Association for Cancer Research (AACR) Annual Meeting 2013 in Washington, DC.

HPV causes almost all the nearly 4,000 deaths from cervical cancer in the United States each year. The two currently available HPV vaccines, Gardasil and Cervarix, protect against a variety of forms of the virus, including two high-risk strains that cause 70 percent of cervical cancer worldwide.

The researchers tested 176 HIV-positive women in the Bahamas; they looked for high-risk strains of HPV and found that about three-quarters carried such forms of the virus and that about 30 percent had precancerous cervical cells. Those women with the precancerous cells carried the two high-risk HPV strains that Gardasil and Cervarix protect against, but they also carried two others not covered by the vaccines.

This research echoes previous findings that have shown that women with compromised immune systems may acquire these more unusual high-risk strains of HPV. To that effect, HIV-positive women on antiretrovirals for four years or more in this study were less likely to have high-risk forms of HPV.

A 2012 study showed that HIV-positive women may still benefit from the HPV vaccines—especially those who haven't yet been exposed to those two high-risk forms the vaccines can protect against.

To read a release about the study, click here.