

Comparison of Patient- and Physician-Collected Specimens to Screen for Anal Cancer

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The full report is titled “Comparison of Patient- and Clinician-Collected Anal Cytology Samples to Screen for Human Papillomavirus–Associated Anal Intraepithelial Neoplasia in Men Who Have Sex with Men.” It is in the 2 September 2008 issue of *Annals of Internal Medicine* (volume 149, pages 300-306). The authors are P.V. Chin-Hong, J.M. Berry, S.C. Cheng, J.A. Catania, M. Da Costa, T.M. Darragh, F. Fishman, N. Jay, L.M. Pollack, and J.M. Palefsky.

What is the problem and what is known about it so far?

Anal cancer is associated with a virus (human papillomavirus, or HPV). HPV spreads through sexual contact and can produce abnormal cells that can become cancer. Men who have sex with men are at high risk for getting HPV infection and anal cancer, especially if they also have HIV infection.

One way to find anal cancer at early, treatable stages is to do cytology testing. Cytology testing involves taking a sample of cells from the anus with a swab to examine in a laboratory. Anoscopy is a more definitive but more complicated and uncomfortable test: It involves using a special instrument to look at the lining of the anus so that samples of abnormal areas can be taken for biopsy. “Biopsy” means taking a sample of tissue for examination under a microscope.

Little is known about the best strategy for screening for anal cancer. Cytology followed by anoscopy for people with abnormal cytology results would be 1 option. Patients might be more willing to have this type of screening if they could collect their own specimen rather than having to see a doctor to take the sample. However, to be useful, cytology would need to be accurate enough that you could be pretty certain that anal cancer was not present if the cytology result was normal.

Why did the researchers do this particular study?

To learn more about the usefulness of cytology testing to screen for anal cancer in men who have sex with men.

Who was studied?

126 men in San Francisco who have sex with men. Of the 126 men, 38 reported that they were HIV-positive.

How was the study done?

The researchers gave all of the men supplies and instructions for how to obtain a sample of cells from the anus with a swab and place the sample in a container to bring in for laboratory testing. All of the men also had samples obtained in the doctors’ office and had anoscopy. The researchers then compared the result of the cytology tests with the result from anoscopy.

What did the researchers find?

The researchers found that men were able to obtain samples, but the physician-collected samples were more accurate than the patient-collected samples. Unfortunately, many men who had normal cytology results—whether collected by the patient or the doctor—had abnormal results on anoscopy.

What were the limitations of the study?

This study examined only 1-time testing. The tests might pick up abnormalities more accurately when they are performed repeatedly over time.

What are the implications of the study?

Although patient-collected samples to screen for anal cancer might increase the patients’ willingness to get screened, cytology testing done as a 1-time test (and not repeated) may not be accurate enough to comfortably recommend that high-risk patients with normal cytology results do not need anoscopy.

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