

# Pap Smears for Anal Cancer?

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Until 50 years ago, cervical cancer was the leading cause of cancer-related deaths among women in the United States. It now ranks 15th. Experts credit a simple procedure called a Pap smear—in which a doctor swabs the cervix and sends the sample to a lab to check for abnormalities—for the plummeting death rates. Now some treatment opinion leaders are saying that Pap smears around back may help protect against anal cancer, notably among HIV-positive men and women who may already be facing a higher risk of this potentially fatal disease.

Anal Paps, the experts argue, can help detect clusters of precancerous cells in the anus. These lesions, caused by two menacing strains of the [human papilloma virus](#) (HPV), are common in men who have sex with men (MSM) and HIV-positive people of any gender or sexual orientation. And as HIV-positive people live longer lives due to antiretroviral therapy, they may be at increased risk of anal cancer as they age.

Rates of anal cancer are fairly low in the general population—approximately one diagnosis per 100,000 people. Stats also suggest that MSM, smokers and people living with HIV are at increased risk. In fact, a study to be published in a forthcoming issue of the *Annals of Internal Medicine* found that the rate of anal cancer in people living with HIV doubled in the past decade and was 60 times higher than in the general public.

And it's not just those engaging in anal sex who are at risk. A Parisian study reported last year found high rates of precancerous lesions among HIV-positive men and women who had never been on the receiving end of anal sex but had a history of other HPV-related problems, such as cervical lesions and penile warts. Though they were half as likely to have precancerous lesions as MSM with HPV and a history of receptive anal intercourse, the rate, 36 percent, is still quite high.

Could anal Pap smears revolutionize anal health care the way that cervical Paps did with women's health care? Experts disagree.

The U.S. Centers for Disease Control and Prevention (CDC), for instance, says there isn't enough evidence to recommend routine anal Pap smears. But Joel Palefsky, MD, a professor of laboratory medicine at the University of California, San Francisco, and other independent HPV experts argue that while more data will certainly be helpful to fine tune screening and treatment strategies, enough evidence exists to support the regular testing and care of precancerous anal lesions in high-risk individuals.

Two HIV-positive gay men—Matt Sharp, from Chicago, and Mark Milano, from New York City—have braved anal cancer scares in the last year. Both caught their cancer at an early stage, largely because they'd been screened with anal Pap smears years ago, found to have precancerous lesions, and have been monitored closely ever since.

Jeffery Schouten, MD, the board chair of the American Academy of HIV Medicine (AAHIVM) and a member of the National Institutes of Health's AIDS Malignancy Consortium, says that while the majority of providers in his own practice at the Harborview Medical Center, in Seattle, don't routinely screen all HIV-positive patients with yearly anal Pap smears, there is a "growing consensus" that doing so may be a good idea.

Although anal screenings might not seem the easiest conversation topic, it's a chat worth having with a health care provider.

Pap smears, whether for the cervix or the anus, aren't perfect. They can fail to pick up abnormal cells as much as half the time. Fortunately, both cervical and anal cancers typically develop slowly. Cervical screenings end up being effective because of their frequency—if they're conducted every year, as gynecologists usually recommend, the chance of detecting precancerous cells, if they're present, increases with each test.

If abnormal cells are found in the anus, Palefsky recommends a procedure called high-resolution anoscopy (HRA). This procedure involves the insertion of a thin, powerful scope into the rectum to examine the anal wall. Palefsky says that the scope should help a clinical specialist, called an anoscopist, to spot anal lesions. If they are found, the anoscopist will remove a small pinch of tissue (a biopsy) and send it to a lab for closer examination. The lab will determine whether the cells represent a low-, moderate- or high-grade lesion. It is the moderate- and high-grade lesions that are believed to have the highest likelihood of developing into cancer; low-grade lesions and anal or cervical warts are typically caused by strains of HPV that aren't associated with cancer.

In a 2004 expert panel discussion recorded and published in *AIDS Clinical Care*, Palefsky and Sue Goldie, MD, from the Harvard School of Public Health, laid out the rationale for routine Pap screening in MSM and people with HIV. While anal cancer isn't common, even in higher-risk populations, anal cancer in MSM does now occur more frequently than cervical cancer in women. They also point out that a variety of health care providers, including primary care providers, can be trained not only to conduct and read the results of Pap smears but also to perform HRA in patients with abnormal anal Paps.

Palefsky prefers that providers enhance their services to offer both Pap screening and HRA in the same office. This isn't possible in many offices and clinics, however, and at a minimum, patients found to have irregular anal Pap smears should be seen by a specialist who is familiar with diagnosing anal lesions.

"If resources were unlimited, with lots of trained people, it would be ideal to forgo [an anal Pap and instead regularly check with HRA instead] because of [the Paps] limited sensitivity and

because such a high proportion of HIV-positive MSM have anal lesions,” Palefsky says. “However, given the limited number of trained people, cytology can be used to prioritize who should be referred to a trained anoscopist, with people with [precancerous lesions] sent first.”

Also participating in that panel discussion was Kimberly Workowski, MD, from the CDC, characterizing what she feels is a critical lack of data supporting routine anal Paps, even in high-risk individuals. She argues that without good long-term studies pinpointing when, how, and how quickly anal lesions progress to cancer in various populations, it remains impossible to solidify screening or guidelines.

Schouten of the AAHIVM, however, agrees with what he calls a growing consensus among providers treating MSMs and people with HIV to do more routine screening. Despite the holes in the data, he says, “it probably makes sense that if you know that someone has [moderate- or high-grade lesions], you would probably follow them closer and do more vigorous exams with anoscopy and pick things up earlier if they do develop invasive cancer.”

Sharp and Milano largely agree with Schouten. Sharp, who was diagnosed with HIV in 1989, and Milano—who tested HIV positive in 1985 when the test first became available but was suspected by his doctor to be infected as far back as 1982—are both long-time AIDS activists and treatment educators. They urge people with HIV not to be squeamish about discussing anal health with their providers. Though both acknowledge the limitations of Pap smears, they encourage people with HIV to ask their providers to be screened and to follow up if abnormal cells are found.

Palefsky says he’s designed a study that will, he hopes, provide some of the data that the experts at the CDC and elsewhere are requesting before they’ll recommend routine anal Pap smears in people with HIV. In the meantime, however, as has often been the case with HIV, people living with the virus will have to make decisions about their health care without all the answers in place, and may have to advocate for themselves and others with HIV to at least get screened and monitored for anal lesions.