



what's new in research

What is anal dysplasia?

Cases of anal cancer continue to rise among HIV-positive gay men

by *Natasha Press, MD*

Men who have sex with men (MSM) have a higher rate of anal cancer than those who don't, especially if they're HIV-positive. A pre-cancer area called dysplasia, which means abnormal cells, occurs first; over time, it may progress to cancer.

The pre-cancer area is caused by a virus called the human papilloma virus (HPV), which is a sexually transmitted disease. There are different types of HPV: some types cause warts, while other types cause dysplasia. Most HIV-positive MSM are infected with several of the different types of HPV. Therefore, warts and dysplasia are common. Although warts may cause symptoms, such as being able to feel a lump, dysplasia doesn't cause any symptoms, so you may not know you have it.

Unfortunately, dysplasia isn't prevented by taking antiretroviral therapy or by having an increase in CD4 count and a decrease in HIV viral load. Therefore, the risk of anal cancer continues to increase in HIV-positive MSM, despite better control of HIV infection. Presumably, as HIV-positive MSM live longer on antiretroviral therapy, the number of cases of anal cancer will continue to increase among this population.

To prevent an increase in anal cancer, some doctors are screening their HIV-positive MSM patients for dysplasia. Screening is still being researched and isn't yet part of recommended guidelines for treating HIV-infected individuals, so not all doctors are doing it.

Screening is done with an anal pap test. A swab, which looks like a Q-Tip, is inserted about one to two inches into the anal canal and is moved around against the mucosa—the skin inside the anal canal. This picks up cells off the mucosa, including abnormal (dysplastic) cells. If the results show that the anal pap is abnormal, then local patients can be sent to the Anal Dysplasia Clinic at St. Paul's Hospital in Vancouver.

St. Paul's Hospital, in collaboration with the BC Centre for Excellence in HIV/AIDS and the BC Cancer Agency, started the outpatient clinic in April 2003 as part of a research protocol.

The goal of the clinic is to find and treat dysplasia so that anal cancer doesn't develop.

HIV-positive MSM who come to the clinic have their anal canal inspected using a microscope to see whether any dysplasia is present. Doctors insert a small plastic tube, called an anoscope, into the anal canal, and then carefully inspect the mucosa through the microscope. If doctors see any abnormal areas, they take a biopsy. The biopsy is a small piece of mucosa, the size of a piece of rice, which is cut off and sent to the lab. If the biopsy result shows a lot of dysplasia, called high-grade dysplasia, then the individual returns to the clinic for treatment.

Different types of treatment are used for dysplasia. At the St. Paul's clinic, doctors use a strong acid that burns off the top of the mucosa, including the abnormal cells. This is similar to getting a sunburn, after which the skin peels off. Other clinics in North America are using laser-type treatments to burn off the dysplasia. It isn't known which type of treatment works best yet, but research is ongoing.

If dysplasia is detected and treated, hopefully anal cancer rates won't increase. However, the treatments used for dysplasia don't get rid of the HPV, so dysplasia can happen again even after being treated. As well, warts aren't treated at the Anal Dysplasia Clinic, so the types of HPV that cause warts are also still there. ⊕

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She does research on anal dysplasia in HIV, and runs the Anal Dysplasia Clinic at St. Paul's.



Further reading in living⊕

"HIV + HPV = pain in the ass" Issue 35 (March/April 2005)

"A bum deal: Treating and diagnosing anal dysplasia" Issue 36 (May/June 2005)