

# Anal cancer

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Since potent and effective HIV treatment became available, the number of cases of the AIDS-defining cancers such as Kaposi's sarcoma and non-Hodgkin's lymphoma has fallen, and the outlook for people diagnosed with these cancers has improved.

There is some evidence, however, that some cancers not traditionally regarded as being AIDS-defining have become more common in HIV-positive people since potent HIV therapy became available. One of these is anal cancer and doctors in the UK, and many other countries where HIV therapy is available, have noted an increase in the number of cases of anal cancer in HIV-positive people, particularly among gay men.

It is thought that the reason there has been an increase in the number of cases of anal cancer since effective HIV treatment became available is because people with HIV are living longer.

The underlying cause of anal cancer is a very common infection called human *papillomavirus* (HPV). Infection with HPV is widespread and is particularly high amongst HIV-positive gay men. Some strains of HPV are cause genital and anal warts and other strains cause cervical cancer in women and anal cancer in men and women.

However, it is important to note that the overwhelming majority of people who have HPV infection do not go on to develop anal cancer. Although anal cancer is more common in gay men with HIV than in the general population, it is still very rare. For example, the large HIV clinic at the Chelsea & Westminster Hospital in London sees fewer than one new case a year.

## Monitoring

Having a regular sexual health screen that involves an examination of the anus and rectum (called a proctological examination) will mean that anal warts and lesions can be detected early. There is no link between visible anal warts and anal cancer. The strains of HPV which can cause cancer do not cause a wart-like growth to develop. Nevertheless, they can cause lesions, and a study found that these can be 'hidden' within clusters of warts. It is worth having a regular anal examination even if you do not have receptive anal sex, or if you always use condoms for anal sex. Studies have found that men and women who have never had anal sex, or always have protected anal sex, nevertheless have anal warts and this could be because HPV can be spread by touch.

Make sure that you tell your doctor if you notice any unusual symptoms in your rectum or anus.

Some HIV clinics are looking at the value of regularly screening individuals with anal HPV for pre-cancerous cell changes . Before cancer develops, cells in the anus will go through a number of changes over many years and pre-cancerous lesions called AIN (anal intraepithelial neoplasia) may develop. Anal screening involves using a test very similar to the cervical screening used to detect changes to cervical cells in women. Cells are scraped from the lining of the anus (which can be uncomfortable), and then examined for signs of abnormalities. Anal screening is not 100% accurate and many doctors aren't convinced of its value. The anus can be examined in more detail using a magnifying instrument during a procedure called an anoscopy. During this procedure small tissue samples from the anus can be removed – biopsied – and examined under a microscope to see if potentially cancerous changes to cells have occurred.

## Treatment

Often the immune system successfully clears infection with HPV. HIV treatment can restore the immune system and improve its ability to fight infections, including HPV. HIV treatment, however, does not have a direct effect against HPV, and cases of anal cancer have occurred in people with good CD4 cell counts and undetectable viral loads. Imiquimod cream may be used to treat AIN.

Anal cancer is usually treated aggressively with a combination of chemotherapy and radiotherapy. You'll normally stay on anti-HIV drugs during this treatment. The cure rate is approximately 60%, but the treatment has side-effects.

Surgery can be used to remove pre-cancerous and cancerous cells from the anus. However, in many cases the pre-cancerous or cancerous cells may recur.

## Vaccination

Vaccines have recently become available that provide a very high level of protection against the main cancer-causing strains of HPV. But they don't work well in people who have already been infected with these strains of HPV and they don't have any treatment effect for cancerous or pre-cancerous cell changes. There is no information yet about how safe and effective the vaccines are in people with HIV, but studies are underway.