Anal cancer is an emerging non-AIDS defining cancer in HIV-infected men who have sex with men (MSM) as well as in HIV positive women. Rates of anal cancer appear to be increasing in the era of antiretroviral therapy. Standard treatment for invasive anal cancer is a combination of chemotherapy and radiation therapy, associated with significant morbidity. Many clinicians believe anal cancer screening to be a reasonable target for a cancer prevention strategy.

### Why Screen for Anal Cancer in HIV-Infected Patients?

- Anal cancer is an emerging non-AIDS defining cancer in HIV-infected men who have sex with men (MSM) as well as in HIV positive women.
- Rates of anal cancer appear to be increasing in the era of antiretroviral therapy.
- Standard treatment for invasive anal cancer is a combination of chemotherapy and radiation therapy, associated with significant morbidity.
- Many clinicians believe anal cancer screening to be a reasonable target for a cancer prevention strategy.

### Risk Factors

- Receptive anal intercourse
- Multiple sex partners
- Human papillomavirus infection
- Smoking
- Lowered immunity (eg. HIV transplant)

### References

5. New York State Health Department, Primary Care Approach to HIV Infected Patient, Updated guidelines, July 2007.

### How to access training:

For a video guide visit: [www.pamaaetc.org/video.html](http://www.pamaaetc.org/video.html)

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Anal Dysplasia in HIV Positive Individuals:

**Whom to screen?**
- There are no national recommendations for routine anal cancer screening.
- The New York State AIDS Institute recommends anal cancer screening for HIV-infected MSM, HIV-infected women with a history of cervical or vulvar dysplasia, anyone with a history of ano-genital condyloma, HIV-infected individual with a history of anal receptive sex, and HIV smokers.

**High-Resolution Anoscopy (HRA)**
- This examination is similar to cervical colposcopy and uses a light source, magnification, and stains such as acetic and Lugols Iodine solution to identify and then biopsy high-grade anal intra-epithelial neoplasia (HGAIN) - the precursor of anal cancer.
- Biopsy proven HGAIN may then be ablated using a number of office techniques including application of trichloroacetic acid and infrared coagulation.
- Following HRA, patients are followed regularly due to the high rates of new HGAIN occurrence.

**HIV INCREASES RISK ANAL DYSPLASIA**

**Suggested Practice:**
At baseline and as part of the annual physical examination for all HIV-infected adults, regardless of age, clinicians should:
- Inquire about anal symptoms, such as itching, bleeding, discharge, or pain
- Perform a visual inspection of the perianal region
- Perform a digital rectal examination

**Anal Cancer: How to Screen**
Screening methods will vary depending on local resources and referral options:
- Identify at-risk individuals and discuss anal cancer signs, symptoms and when to seek medical attention.
- The standard screening test for anal cancers is an annual digital rectal examination and perianal inspection. Referral for further examination should be made if firm, nodular or painful areas are noted or if there is evidence of blood on the examining finger or if there are discrete hyper- or hypo-pigmented, ulcerated or perianal lesions.
- Anal cytology (the anal Pap test) may be taken to test for cellular changes. This test is best used when referral to an anal dysplasia clinic is available.
- This test is taken before a digital exam and uses a water moistened polyester swab that is inserted into the anal canal and removed with lateral pressure and a spiral motion to sample the entire circumference of the canal and transition zone. The swab is then agitated vigorously in liquid cytology media to disgorge cells. Referral to a specialized anal dysplasia clinic should be made when there is any evidence of cellular abnormality (ASCUS, LSIL, ASC-H, HSIL).

Primary care clinicians should refer HIV-infected patients with anal cancer to an oncologist for treatment.