

# **Cervical and Anal Cancer Screening in HIV-infected patients**

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## **Educational Objectives:**

1. Describe the risk factors of cervical cancer and anal cancer.
2. Appreciate guidelines for cervical and anal cancer screening in HIV-infected patients.
3. Know who to refer for colposcopy and anoscopy.
4. Describe the preventative measures for cervical and anal cancer.

## **CASE ONE:**

Ms H is a 27 year old woman with history of HIV (diagnosed 3 years ago, Last VL undetectable, CD4 count 561, with good adherence on dolutegavir/abacavir/lamivudine) presents to clinic for routine follow up. On exam, she has normal vital signs, with unremarkable exam. Her last PAP smear was 2 years ago.

## **Questions:**

**1. What are the risk factors associated with cervical cancer?**

**2. How often should HIV-infected women be screened for cervical cancer?**

## **CASE ONE CONTINUED:**

Pap smear is obtained in clinic. You obtain the cytological results and it reads atypical squamous cells of undetermined significance (ASC-US) with reflex HPV positive for high risk

**3. What is your next step in management?**

**CASE ONE CONTINUED:**

Colposcopy results show no CIN.

**4. What is your next step in management?**

**CASE TWO:**

Mr A is a 26 year old man with history of HIV (last VL 13,000, CD4 140, non-adherent to ARVs), presents to clinic for routine follow up. He acquired HIV through unprotected anal intercourse. He is one of your new patients, and he has deferred the exam of the anal area on prior visits. Patient notes he has had recent anal itching and spots of blood on his tissue when he wipes.

**5. How are precursors of anal squamous cell cancer classified? What are the risk factors of developing such lesions?**

**6. Who should be screened for anal cancer and how often?**

**CASE TWO CONTINUED:**

Mr A undergoes an anal exam. On physical exam, he has anal warts. You perform an anal pap. Anal cytology results show low grade anal squamous intraepithelial neoplasia.

**7. How do you perform an anal pap smear?**

**8. What is your next step in management? What referral(s) will you make?**

**CASE TWO CONTINUED:**

Your patient undergoes HRA. His biopsy shows anal intraepithelial neoplasia (AIN), grade 1.

**9. What is your next step?**

**10. How could cervical and anal cancer been prevented in the above two cases? What is the dosing schedule?**



**Required Reading:**

1. Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. Available at [http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult\\_oi.pdf](http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult_oi.pdf).  
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3. Chiao EY, Giordano TP, Palefsky JM, Tyring S, El Serag H SO. Screening HIV-infected individuals for anal cancer precursor lesions: a systematic review *Clin Infect Dis.* 2006;43(2):223.
4. NYS Guidelines Recommendations on Anal Pap Smears. National AIDS Treatment Advocacy Project. [http://www.natap.org/2010/HIV/032510\\_01.htm](http://www.natap.org/2010/HIV/032510_01.htm)
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