

Office Gynecology and HIV

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Objectives

- Be familiar with common gynecologic conditions in the HIV+ woman
- Know the differences in recommended contraception for the HIV+ vs. the HIV- woman
- Know how to provide preconception counseling to the HIV+ woman

- 27% of those infected with HIV in the United States are women
- 78% of infections in women in the U.S. are sexually transmitted

Gynecologic problems are more common in HIV + women

- Genital warts (human papilloma virus or HPV)
- Cervical dysplasia
- Cervical cancer
- Genital ulcer disease
- Vaginal infections

GENITAL WARTS

Caused by human
papillomavirus (HPV)

Perineal Condyloma



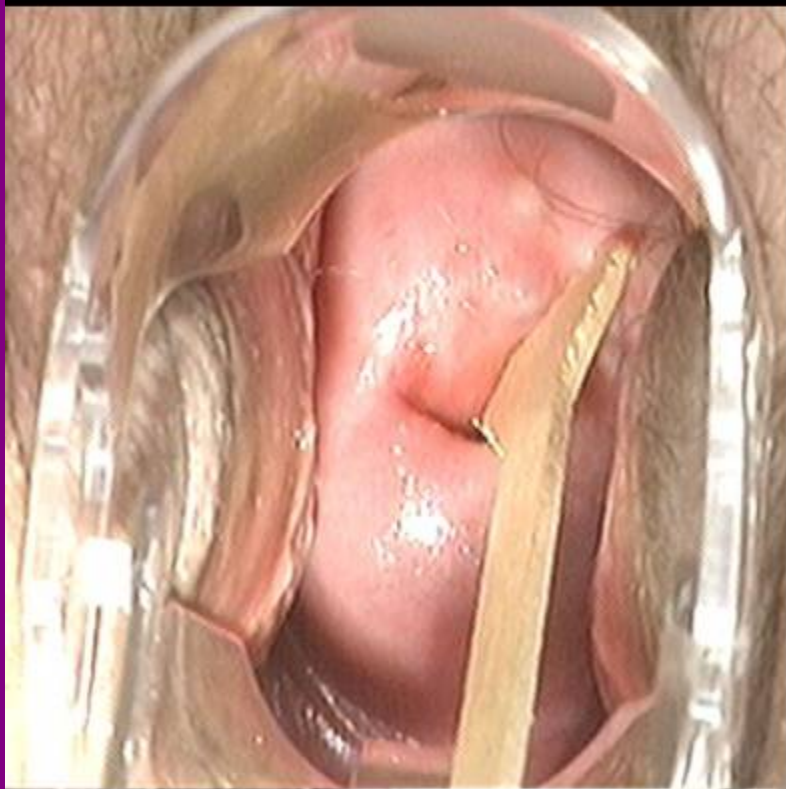
Treatments for vulvar warts

- Self-applied
 - Imiquod (Aldara) activates immune response
 - Podophyllin (Condylox)
- In office
 - Trichloroacetic acid (TCA)
- Surgical
 - Laser
 - Electrocautery
 - Excision

- If warts do not respond to topical therapy, then biopsy
- Remember there is a risk of vulvar dysplasia and malignancy
- Look carefully at perineum; vulvar dysplasia tends to be multifocal

ABNORMAL PAP SMEARS

Pap smear: Ecto- and endocervix



Ayers spatula



Cytobrush

Paps

- Do two Paps 6 months apart in the woman with newly diagnosed HIV
- If Paps are negative, then repeat annually
- Repeat Paps more frequently if
 - Symptomatic HIV or CD4 <200
 - History of cervical dysplasia

Human papilloma virus (HPV)

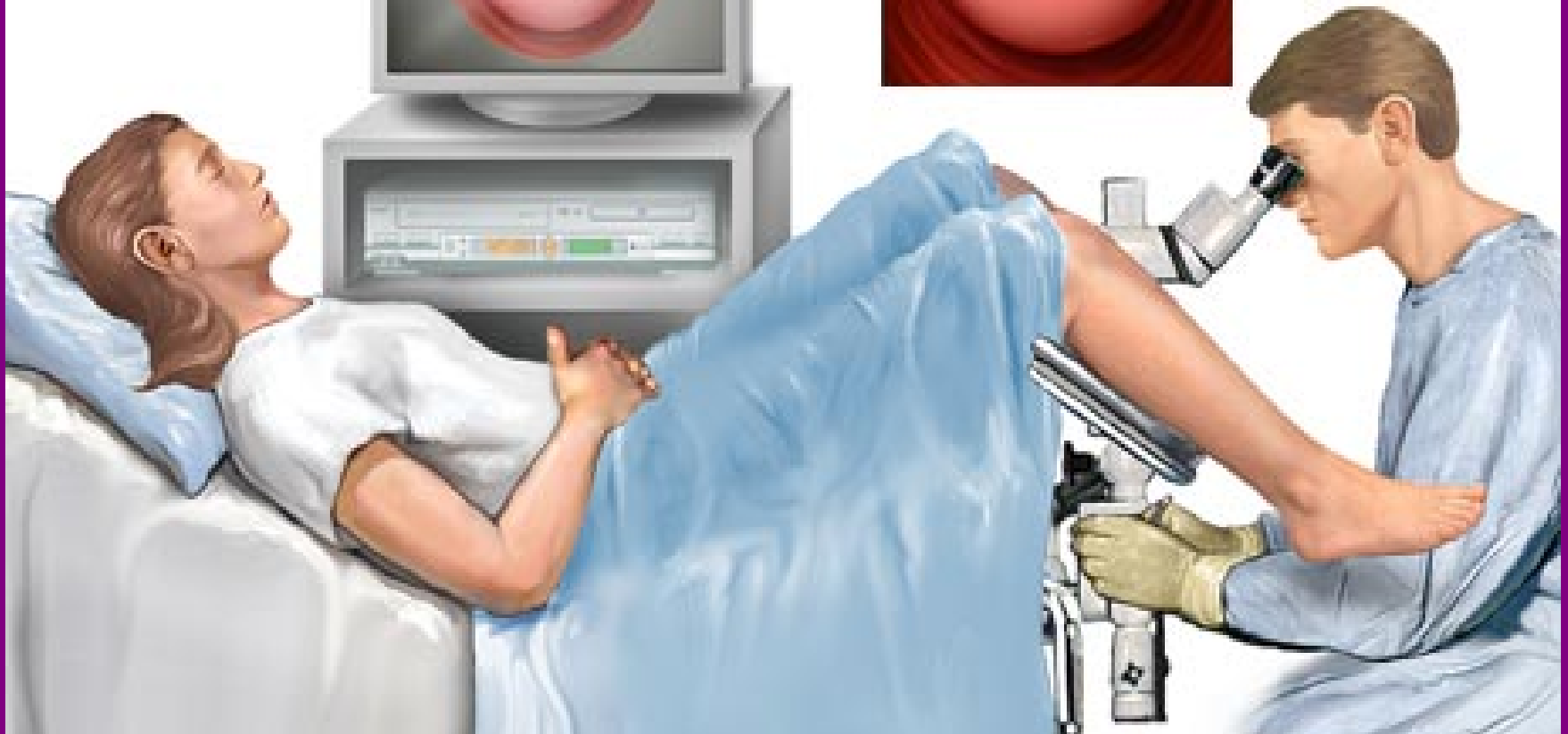
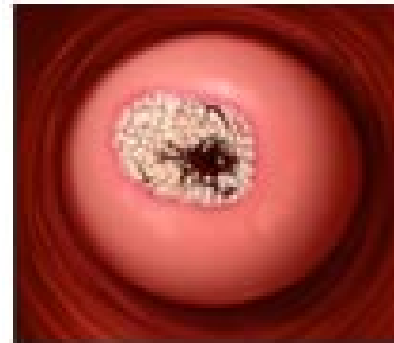
- Abnormal Paps common
 - ASC-US (atypical squamous cells of uncertain significance)
 - LSIL (low grade intraepithelial lesion)
 - HSIL (high grade intraepithelial lesion)
 - AGC or AGUS (atypical glandular cells)

- Colposcopy and biopsies recommended for any abnormal Pap in the HIV+ woman
 - 38% of ASCUS Paps in HIV+ women are associated with dysplasia
- Dysplasia can affect the cervix, vagina, and/or vulva (CIN, VAIN, VIN/grades 1, 2, and 3)



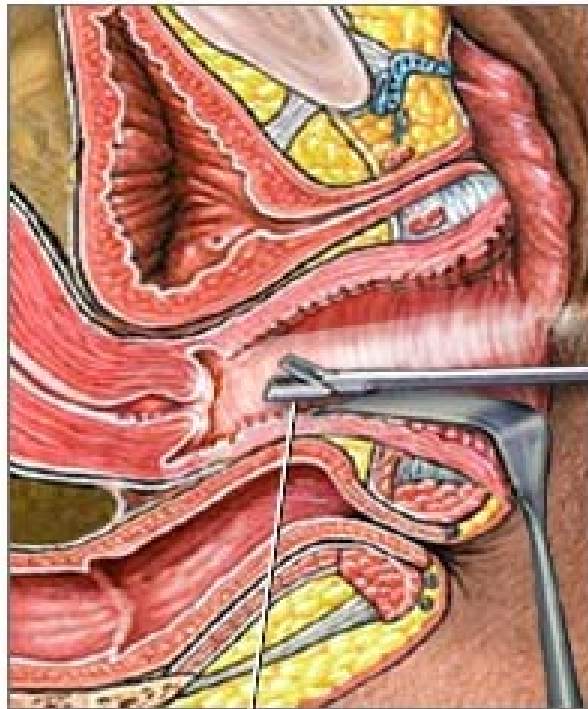
Normal cervix

Spreading cancer

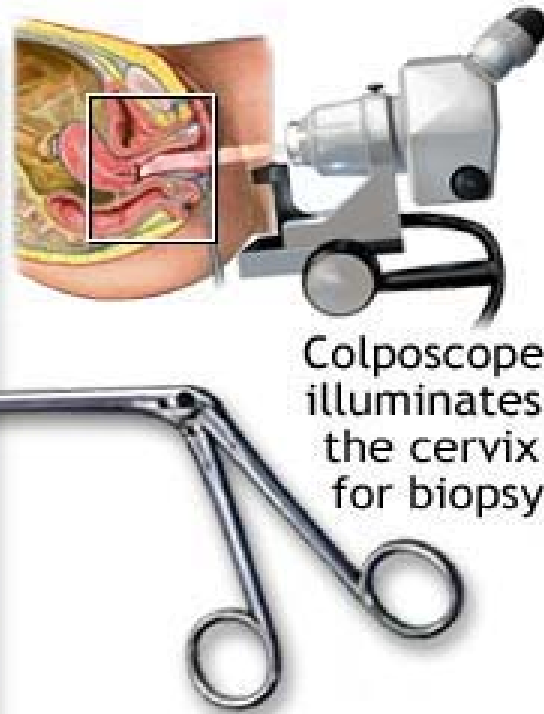




mosaic major



Biopsy forceps are used to sample the cervix



Colposcope illuminates the cervix for biopsy

HIV and cervical dysplasia

- Lower CD4 counts are associated with increased risk of dysplasia
- CIN is associated with cervicovaginal shedding of HIV
- HAART reduces the incidence of warts and vulvar dysplasia

Taylor, G et al. JBAFP 17 (2): 108, 2004

Massad, LS et al. AJOG 190: 1241, 2004

Spinillo, A et al. Obstet Gynecol 107 (2): 314, 2006

Genital ulcers

- Herpes most common
- If Herpes, usually painful
 - Do HSV culture, early in outbreak
 - However, if negative, this does not rule out HSV
 - No reason not to treat empirically with acyclovir 400 mg TID or valacyclovir 1 g BID for 7-10 days



Genital Herpes in Female



Genital ulcers

- Rule out syphilis (though these ulcers are usually painless)
 - Do RPR
- If ulcers do not resolve on acyclovir and RPR is negative, do biopsy of ulceration

Increased risks of HIV transmission associated with herpes?

- Frequency of herpes flares can be reduced by taking a daily pill of valacyclovir
- Transmission of herpes to sexual partners can be reduced by the same
- Can prevention of herpes flares reduce the risk of HIV transmission?

Suppression of HSV

- Reduces serum HIV level
- Reduces genital compartment HIV level

Herpes

- Majority of HSV is asymptomatic (asymptomatic shedders)
- Suppression of HSV with acyclovir reduces the quantity of HIV in cervicovaginal compartment
- Should HIV+ women with HSV be on suppression, especially if they have HIV-partners?

Other STDs

- Gonorrhea
 - Rocephin 125 mg IM single dose
- Chlamydia
 - Azithromycin 1 g stat dose or doxycycline 100 mg BID for 1 week

And don't forget to treat the partner(s), which is now recommended by CDC (EPT=expedited partner treatment)

Expedited Partner Treatment

- Three RCTs show improved eradication of Gc/chlamydia if partners provided with EPT (vs. telling partner to seek medical care)
- Permitted in 11 states
- Possible in 28 states
- Prohibited in 13 states
- Check your state law. If against the law, work to educate state officials and change the law.

Vaginal infections

- Candida (yeast)
 - OTC fine for most/ Clotrimazole least expensive
 - Terconazole works for non-albicans species
 - Fluconazole (Diflucan) 150 mg or 200 mg orally single dose/repeat in 3 days
 - For recurrent/persistent yeast, consider fluconazole weekly for up to 6 months

- **Trichomonas**

- New evidence that presence of Trichomonas increases the risk of HIV acquisition (does this also affect transmission?)
- Metronidazole 2 g stat dose OR 500 mg BID for 1 week

- **Bacterial vaginosis**

- Metronidazole 500 mg BID for 1 week

– McClelland RS JID 2007

Menstrual abnormalities

- No evidence that HIV+ women have more irregular periods than HIV- women once co-morbidities are excluded (substance abuse, weight loss, ...)

– Harlow, SD AJOG 188: 991, 2003

Sexual assault: Question

It is recommended to give antiretroviral treatment (post-exposure prophylaxis) for women who have been sexually assaulted

- A. Strongly agree
- B. Agree
- C. Neutral
- D. Disagree
- E. Strongly disagree

Non-occupational post-exposure prophylaxis

- If a woman has been assaulted by someone who is known to be HIV+ and she presents for care within 72 hours, then 28 days of HAART recommended
- If attacker is of unknown HIV status or > 72 hours have passed since the assault, individualize care

Modes of contraception

- Condoms (male and female) provide protection against HIV but the majority of contraceptive methods do not
 - Hormonal, e.g. birth control pills, patch, NuvaRing, progesterone injections, implant
 - Diaphragms
 - IUDs
 - Spermicides (chemical irritation may increase risk of HIV infection or transmission)
 - Sterilization (tubal ligation, Essure, vasectomy)

Question: Contraception

Oral contraceptives are an optimal form of birth control for HIV+ women

- A. Strongly agree
- B. Agree
- C. Neutral
- D. Disagree
- E. Strongly disagree

Interactions of oral contraceptives and antiretrovirals

- Protease inhibitors and NNRTIs may reduce efficacy of OCPs
- Do not solely rely on OCPs or implant for contraception if on ARVs OR consider higher dose OCPs
- NuvaRing and patch may have less of an interaction—little evidence available; implant is currently not advised for women on ARVs

Depo-Provera

- Effective contraception
- Not contraindicated if woman is hypertensive or smoker
- May exacerbate lipodystrophy and central adipose deposition

IUDs

- Controversial: concerns about risks of PID
- If in a mutually monogamous relationship and HIV is well-suppressed, then the IUD is a reasonable option

Permanent sterilization

- Do more HIV-positive women opt for permanent sterilization after having one child than HIV-negative women?
- Be aware of new methods like Essure

Contraception and beyond

- Discuss contraception/childbearing early in care of the HIV+ woman and discuss it often
- Discuss it again
- And when there is desired fertility...

Case

- 31 y.o. G2P2 comes to discuss possibility of future pregnancy. She has children ages 10 and 11 who are healthy. She was diagnosed with HIV 2 years ago. Her CD4 is 480 and VL is 65,000. She has never been on HAART.
- Her new partner is HIV- and has never fathered a child.

Preconception counseling

If a woman is considering pregnancy,

- Substitute other ARVs for efavirenz (Sustiva) because of risk of neural tube defects (NTDs)
- Recommend folate or prenatal vitamins preconceptionally to reduce chance of NTDs

Question: preconceptual counseling

Should she go on antiretroviral therapy prior to conception?

- A. Strongly agree
- B. Agree
- C. Neutral
- D. Disagree
- E. Strongly disagree

Serodiscordant couples

If the woman is HIV+ and the man is HIV-, discuss the options of:

- Ovulation predictor kits
- Home insemination (“turkey baster method”)

Serodiscordance

If the man is HIV+ and the woman is HIV-, then consider:

- Maximal viral suppression of the male
- Ovulation predictor kit/ timed intercourse
- Sperm washing
- Intracytoplasmic sperm injection (ICSI)

Question: Infertility

Should HIV+ women receive the same infertility evaluation and treatment as HIV- women (clomiphene, IVF, IUI)?

- A. Strongly agree
- B. Agree
- C. Neutral
- D. Disagree
- E. Strongly disagree

Arguments for and against offering the same services to HIV+ women as HIV- women

- Cons
 - Woman may not live to see her child grow up
 - Woman may be too sick to care for her child
- Pros
 - HIV+ women are having close to normal life expectancy
 - To deny services may increase risk of transmission to partner

More on assisted reproduction in serodiscordant couples

- 55 serodiscordant couples (male HIV+ and female HIV-)
- Sperm wash and intracytoplasmic sperm injection (ICSI)
- 30% pregnancy rate
- No HIV seroconversion in partner

Moving on in age...

Bone density

	Osteopenia	Osteoporosis
Healthy controls	20%	4%
HIV+		
Low weight	50%	15%
Normal weight	30%	5%
Oligomenorrhea	40%	15%
Nonoligomeno.	28%	3%
	Mean age 40	

- Decreased bone density is more common in HIV+ women than HIV- women
- Consider DEXA scans before age 60 (maybe earlier if risk factors like smoker, thin, Caucasian or Asian)
- Alendronate 70 mg weekly
 - more effective than Ca++ and Vitamin D
 - well tolerated

What is coming...

- More investigation of concentration of ARVs in genital tract
 - AZT, 3TC, FTC, and TDF concentrations were higher in genital tract than plasma
- **MICROBICIDES...**

Best practices

- Be aware of STDs that are more common in the HIV+ woman and importance of treating them
- Know how to adjust your contraceptive counseling for the HIV+ woman
- Be able to provide preconception counseling to the HIV+ woman

- THANK YOU!
- If questions, feel free to e-mail me at jlevison@bcm.edu