Clinical Care of Gynecological Problems in HIV

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Outline

• List of problems is long!
• Abnormal uterine bleeding (AUB)
• Menopause
• HIV and HPV: Cervix and other sites
• Conclusion
The list is long

• Vaginal discharge
• Cervical and ano-genital cancers
• Abnormal uterine bleeding
• PID and Pelvic masses
• Urinary symptoms
• Genital warts and ulcerative disease
• Genital itching and/or irritation
• Breast lump
• Sexual dysfunction
• Menopause
Gynecological problems are common in HIV

- 47% of HIV infected women will have at least one gynecologic event over a year (Am J Obstet Gynecol 1999;180:824)
1. AUB and amenorrhea

- HIV infected threefold more likely to have amenorrhea without ovarian failure (FSH >25mIU/mL) (Obstet Gynecol 2006;108(6):1423)

- Excessive loss associated with Ritonavir and Atazanavir (Int J STD AIDS 2007;18(9):651)

- Problems commoner with lower CD4+ counts (Obstet Gynaecol Res 2010;36(5):1053)
2. HIV and Menopause

• There is earlier onset associated with higher rates of fracture, CVD and all-cause mortality
  (J Acquir Immune Defic Syndr 2000;23:99-100)

• Increased frequency of psychological and vasomotor in women with higher CD4+
  irrespective of ART status
  (J Acquir Immune Defic Syndr 2000;23:99-100)

• Mechanism is unknown but may be related to CD4+ count (<200)
  (Clin Infect Dis 2005;41:1517-1524)
Co-morbidities associated with HIV

• CVD risk is higher and at a younger age: ongoing HIV replication, immunological factors and inflammation (also associated with bone loss)

• HIV infected have higher triglycerides levels, and lower HDL (J Acquir Immune Defic Syndr 2005;39:44-54)

• Treatment with ART increases these risk factors: Dyslipidaemia, insulin resistance and diabetes
Co-morbidities associated with HIV

• The RR of AMI is increased with every year of exposure (N Engl J Med 2003;349:1993-2003)

• Some ARVS are associated with more bone loss than others (TDF, d4T, ABC, PIs) (AIDS 2009;23:817-824)

• A low CD4+, count, HCV co-infection, DM and substance abuse are additional risk factors for fractures (Clin Infect Dis 2011;53:1120-1126; Clin Infect Dis 2011;52:1061-1068)
Management symptomatic menopause

• Exclude non HIV-related

• Where HT contraindicated
  – Venlafaxine, Paroxetine, Clonidine, Gabapentin

• Where HT is indicated: Exclude Hormone sensitive tumor, CHD, TED)
  – Trial off every 1-2 years to assess on-going need

• Mind drug interactions!
What about bone scans???

• “As the cock said to the hens when he showed them an ostrich egg, I am not being disparaging and I am not criticizing, I am merely bringing to your attention what is being done elsewhere!”
Management of bone disease

Assess Bone Density
DEXA scan

Osteoporosis
T score below -2.5
Or fragility fracture

Osteopenia
T score below -1 to -2.5
No fragility fracture

Normal
T score above -1.0
No fragility fracture

Prevent further bone loss: optimize calcium, Vitamin D, weight bearing exercise

Evaluate for 2° causes

Ca, PO4, PTH, TFTs
Celiac antibodies

Biphosphonates
Cont ART - currently no evidence that switching will improve BMD and reduce fracture risk

DEXA 1-2 years

DEXA 2-5 years

Work Up

Treatment

Follow up
3. HIV and HPV

A toxic combination
Abnormal Pap smear

- In HIV infected, 30-60% Pap smears have cytologic abnormalities

- 15-40% show dysplasia i.e 10-11 times the rate in HIV negative women (J Natl Cancer Inst Monogr 1998;23:43)
Abnormal Pap results

• 5-17% of women with ASC have underlying CIN 2-3 and 0.1% have ICC (J Natl Cancer Inst 2001;93:293)

• 24-92% of women with ASC-H have CIN 2-3 (JAMA 2002;287(16):2120)
Integrated care

• Women receiving gynecologic and ART at the same location are more likely to have had Pap smear in the previous year (J Acquir Immune Defic Syndr 2001;27:463)
HPV in HIV infected

- Longer persistence of HPV infection, >50% in Africa (Am J Epidmiol 2000;151:1148; AIDS 2006;20:2337)
- Greater prevalence of oncogenic subtypes (Acta Cytol 2009;53:10)
Summary: HIV+HPV $\rightarrow$ more aggressive ICC

Increased HPV VL and declining CD4+ are associated with more extensive ICC at presentation (Gynecol Oncol 1990;38:377)

and

presents at a younger age (a decade earlier)
Take home message: Screen regularly and manage dysplasia

Incidence of invasive cancer is **NOT higher** among HIV infected who are screened regularly and receive recommended treatment than among HIV negative (Obstet Gynecol 2004;104:1077; Cancer 2009;115:524)
HPV-related dysplasia outside the cervix

• HIV infected have a 10 fold increase in incidence and prevalence of: VIN,VAIN,PAIN

• PAIN
  – Anal HPV reported in 90% HIV infected women
  – commoner with lower CD4+, high HIV VL
  – Sensitivity of anal smear similar to that of Pap smear
Vaginal, vulvar and anal screening

• Consider vaginal cytology and colposcopy of the entire lower genital tract with:
  – Visible evidence cervical, vaginal or vulval HPV infection
  – Current CIN or history of CIN
  – Cervical, vaginal, or vulvar cancer

• Anal screening
  – Verbal screening: bleeding/pain
  – Perform annual digital examination
  – Consider anal cytology with a history of CIN/genital warts
Vaccination

• Given existing evidence for safety and immunogenicity and the potential to prevent HPV-associated disease and cancer in HIV infected women, either the bivalent or quadrivalent HPV vaccine is recommended for HIV infected females aged 13-26 years (Obstet Gynecol 2010;55(2):197)
In Conclusion

• Gynecological problems are common

• The vagina does not bite!

• Look down there regularly

• Refer what you cannot manage
Some Doctors have figured it out: **Patients want a One Stop Shop**