

## Post-exposure prophylaxis for sexual assault victims

Ronald D. Wilcox, MD, FAAP

Recently the Louisiana AETC received a consultation request regarding post-exposure prophylaxis for a young woman who had recently been sexually assaulted at knife point. She was seen at a local emergency room after the incident and was placed on a HAART regimen consisting of lopinavir/ritonavir and lamivudine/zidovudine within the 72-hour window period. She reported to her own physician a few days later and was found to have extreme fatigue from the HAART regimen and wanted to know if she should continue the medication.

The Centers for Disease Control and Prevention in Atlanta released, on January 21, 2005, guidelines for post-exposure prophylaxis for HIV in non-occupational settings (termed nPEP). These Guidelines have not had any more recent updated versions released. The Guidelines discuss the importance of evaluating sexual assault victims for consideration of nPEP. Sexual assault occurs in up to 13% of women in the United States with 5% of these women reporting more than one incident. Sexual assault also occurs in men and may account for 5-12% of sexual assault victims; there are reported cases of HIV infection occurring as a result of sexual assault in men. A study of incarcerated men in Rhode Island found that 1% of those convicted of sexual assault were HIV-infected (0.3% of the general population) so assault victims are at increased risk of exposure.

Sexual assault leads to traumatic injury to the tissue, causing tears in the vaginal mucosa or rectal mucosa, which increases the chance of HIV acquisition upon exposure. In one study, toluidine blue dye was used to assist with detection of vaginal lacerations, as well as a naked eye exam; 40% of assaulted women with 70% of those who were nulliparous had vaginal lacerations versus 5% of women who had consensual sex.

The Guidelines recommend nPEP for victims of sexual assault if it can be started within 48-72 hours of the event for those with a known HIV-infected assailant and considered for those with an assailant of unknown HIV status. The recommendation is for medications similar to those with occupational exposure and the course of therapy should be 28 days. The effectiveness of shorter courses of therapy have not been well studied. Unfortunately the majority of sexual assault victims do not complete the recommended therapy. In a study from Vancouver of 258 victims of sexual assault, only 28% accepted a five-day starter pack of medications, only 41% of these returned for additional doses, and 11% completed the 28 days.

For this consultation, I recommended encouragement of the patient to remain on HAART for the full course if possible but to consider changing from the lamivudine/zidovudine, the most likely cause of the severe fatigue, to tenofovir/emtricitabine, as long as the patient does not have renal insufficiency.❖

### REFERENCES

Kilpatrick DG, Edmunds CN, Seymour AK. Rape in America: a report to the nation. Arlington, VA: National Crime Victims Research and Treatment Center and Medical University of South Carolina; 1992.

Lauber AA, Souma ML. Use of toluidine blue for documentation of traumatic intercourse. *Obstet Gynecol* 1982;60:644-8.

Lipscomb GH, Muram D, Speck PM, Mercer BM. Male victims of sexual assault. *JAMA* 1992;267:3064-6.

Smith DK, Grohskopf LA, Black RA, et al. Antiretroviral postexposure prophylaxis after sexual, injection-drug use, or other nonoccupational exposure to HIV in the United States. *MMWR* 2005 January 21; 54(RR02):1-20.

Spaulding A, Salas C, Cleaver D, et al. HIV seroprevalence in male sexual offenders in Rhode Island: implications for post-exposure prophylaxis [Abstract]. Presented at the 8th Conference on Retroviruses and Opportunistic Infections, Chicago, Illinois, February 2-4, 2001.

U.S. Department of Justice. National Crime Victimization Survey: criminal victimization in United States, 1999 statistical tables. Available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus99.pdf>

Wiebe ER, Comay SE, McGregor M, Ducceschi S. Offering HIV prophylaxis to people who have been sexually assaulted: 16 months' experience in a sexual assault service. *CMAJ* 2000;162:641-5.

*Ronald Wilcox is Principal Investigator/Program Director, Delta Region AETC; Assistant Professor of Internal Medicine and Pediatrics, Section of Infectious Diseases, LSU Health Sciences Center.*