Herpes Treatment May Stem HIV Transmission

Treating genital HSV in coinfected women showed promising results in Thai, South African trials.

BY TIMOTHY F. KIRN
Sacramento Bureau

Los Angeles — Treating genital herpes simplex virus with acyclovir diminishes vaginal HIV shedding and plasma HIV levels in women coinfected with HSV and HIV, which suggests that treating herpes could have a role in reducing HIV transmission, according to two studies presented at the 14th Conference on Retroviruses and Opportunistic Infections.

A study conducted in Thailand by the U.S. Centers for Disease Control and Prevention found that 55% of treated women had a significant reduction in vaginal viral shedding during their treatment, said Dr. Eileen Dunne, of the Division of Sexually Transmitted Diseases Prevention of the CDC.

In a study from South Africa, treated women had a reduction in herpes simplex virus type 2; 63% less vaginal shedding, compared with placebo-control women; and a 43% reduction in plasma HIV levels, said Dr. Sinead Delany-Moretlwe, director of research for the reproductive health and HIV research unit at the University of the Witwatersrand, Johannesberg, South Africa.

Neither study was without some equivocal results that tempered the investigators' overall assessment of the findings, but both investigators nevertheless concluded that their trial showed benefit. Both also noted that although their studies were short, they were optimistic that longer trials, currently underway, of HSV suppressive therapy and actual HIV transmission would find that such therapy reduced transmission.

On acyclovir, 55% of the subjects had a significant reduction in HIV shedding, and there was a 2.8-fold drop in HIV load in vaginal lavage samples.

Each trial lasted only 3 months.

The Thailand study analyzed data from 67 women coinfected with HSV and HIV. The women were assigned into one of two groups. One group was treated for 1 month with acyclovir 800 mg twice daily, and the other served as a control. After a 1-month washout with no drugs, the groups were switched.

Overall, 34% of the women had no vaginal HIV shedding at baseline and so had no change through the trial. However, 55% of the subjects did have a significant reduction in HIV shedding while on acyclovir. And there was a 2.8-fold drop in HIV load in vaginal lavage samples, which was statistically significant, though the mean 0.4-log drop in viral load is not far above the 0.3 sensitivity limit of HIV viral load testing.

Dr. Dunne noted, however, that most of the women had never had herpes symptoms, and their HIV was in such an early stage that it was not being treated. And, she said, the treatment might have a more profound effect on people with more advanced disease.

"You might expect the impact would be greater in a group with immunosuppression or a group with symptomatic herpes," she said.

"We are hopeful that this study foreshadows positive results from the ongoing trials that are evaluating the effect of suppressive therapy [of HSV] on transmission of HIV," she added.

The South African study had 169 women treated with acyclovir (400 mg twice daily) or placebo for 3 months. Like the patients in the other study, they were HIV positive and not on antiretroviral therapy.

The study found no statistically significant drop in the vaginal HIV viral load. But it did find a 2.4-fold decline in mean plasma viral load relative to placebo, and a larger percentage of the treated patients were found not to be shedding HIV at all visits. Of the treated women, 23% were found to be shedding at fewer than half of their weekly visits, versus 17% of the placebo-control women.

By the third month, HSV shedding had been reduced by 63% in the treated patients, compared with the placebo group.

"We believe this warrants further investigation over a longer follow-up," Dr. Delany-Moretlwe said. ■

New Diagnostic Tests, Treatment Noted for Vaginal Trichomoniasis

BY ROBERT FINN
San Francisco Bureau

San Francisco — Trichomoniasis is the cause of about 20% of vaginitis complaints, and there are two new diagnostic tests and one new treatment available for this disorder, Dr. Jeanne Marrazzo said at a conference on contraceptive technology sponsored by Contemporary Forums.

The wet prep remains a valuable diagnostic tool, and metronidazole remains an entirely acceptable treatment, but Dr. Marrazzo, of the University of Washington, Seattle, said that the newer diagnostic techniques are "woefully underused," and that tinidazole has a number of advantages as a treatment.

A patient can have trichomoniasis even if she hasn't had sex in many months or years; the organism can remain hidden in the subepithelial glands, only to reemerge.

Accurate diagnosis is critical because, "Although we think of trich as causing a purulent vaginal discharge, often malodorous, many if not most women with trichomoniasis are asymptomatic," Dr. Marrazzo said. And a woman may have trichomoniasis even if she hasn't had sex in many months or years. The organism can remain hidden in the subepithelial glands, only to reemerge during a period of antibiotic use or changing hormonal status.

Although *Trichomonas* can usually be seen in a wet prep, the detection rate increases with practice. It's important to look at the wet prep very quickly; 20% of the organisms disappear within 10 minutes, and they're all gone within a half-hour.

The most common alternative is the BD Affirm VPIII Microbial Identification Test from Becton, Dickinson and Co. Based on nucleic acid hybridization technology, BD Affirm tests for the presence of *Trichomonas, Gardnerella,* and *Candida* species. Results take about 45 minutes.

But there are two quicker alternatives. The XenoStrip-Tv T vaginalis test from Xenotope Diagnostics Inc., and the OSOM Trichomonas Rapid Test from Genzyme Corp. both use dipstick technology and return results in about 10 minutes. Compared with wet mounts, these tests have a sensitivity of 67%-83% and a specificity of 98%-100%.

Until recently, metronidazole, either as a single-dose (2 g) or as an oral regimen, was the only treatment for trichomoniasis. Recently, however, single-dose tinidazole (2 g as well) has been added to the treatment guidelines for trichomoniasis, giardiasis, and amoebiasis.

Tinidazole has a better safety and side-effect profile, and women experience much less of the nausea and vomiting commonly seen with metronidazole. The half-life of tinidazole is longer, however, meaning that women must avoid alcohol for 3 days after treatment. Moreover, tinidazole is not safe during pregnancy.

With either metronidazole or tinidazole, systemic treatment is necessary and local treatment is ineffective. Dr. Marrazzo disclosed serving as a consultant or speaker for Ther-Rx Corp., Quindel Corp., Mission Pharmacal Co., Merck & Co., and 3M.

Contemporary Forums and this news organization are wholly owned subsidiaries of Reed Elsevier. ■

Manual Vacuum Aspirator Lauded in Surgical Abortion

BY ROBERT FINN
San Francisco Bureau

San Francisco — The manual vacuum aspirator is an important but often neglected tool for pregnancy terminations, Dr. Frederick W. Hopkins said at a conference on contraceptive technology sponsored by Contemporary Forums.

"We've done a lot of educating women about medical abortion," said Dr. Hopkins, an ob.gyn. in group practice in San Jose, Calif. "We haven't done as much education about how gentle and brief early surgical abortion is. And [the manual vacuum aspirator] can be very well utilized in the emergency room [with] women who are having miscarriages." Its use can help avoid a trip to the operating room.

"In the developing world, this instrument is saving women's lives," he added.

There's little practical difference between the electric vacuum aspirator (EVA) and the manual vacuum aspirator (MVA). The only difference is the source of the vacuum. One advantage of the EVA is that it provides a limitless source of suction. The suction in the MVA needs to be recharged occasionally.

On the other hand, the MVA is much quieter than the EVA. Because some physicians believe that patients will associate the noise of the electric motor with the pain of their uterine contractions, the EVA unit is placed in another room, its suction tubes coming through the wall.

Although some believe that the EVA can help physicians complete the procedure more rapidly, Dr. Hopkins said "with the MVA, in 30 seconds I can empty a uterus for somebody who's less than 8 weeks [pregnant]."

The MVA has the additional advantages of being reusable and portable and of not requiring a source of electrical power. Even when Dr. Hopkins is using an EVA, "I always have an MVA next to me in case the electricity goes out."

And he finds that the MVA is somewhat gentler on the tissue it extracts. The gestational sac often becomes shredded by an EVA, while the sac tends to remain intact with an MVA. This makes it simpler to identify the products of conception, ensuring that the procedure is complete and saving the time and expense of subsequent pregnancy testing. This is especially important in rural communities or other situations in which women must travel long distances for an abortion.

For the same reason, the MVA can allow an early diagnosis of ectopic pregnancy.

At least five studies of more than 17,000 patients demonstrated efficacy rates of 98%-99% for MVA, Dr. Hopkins said.

Contemporary Forums and this news organization are wholly owned subsidiaries of Reed Elsevier. ■

Pages 24a—24b