

In the news

The Conference on Retroviruses and Opportunistic Infections (CROI) is an annual scientifically-focused meeting of the world's leading researchers working to understand, prevent, and treat HIV/AIDS and its complications. They met most recently in February 2006 in Denver, Colorado. *Relay* editorial board member Dr. Joss de Wet was there. He reports on what came out of the scientific mill and how that information should guide care.

Integrase inhibitors: at last some excitement

Integrase inhibitors, a new class of antiretroviral medications, are offering hope for treatment-experienced patients. Early results were presented on two products under development at Merck and at Gilead. Merck's product, MK-0518, has shown activity against HIV that's resistant to current classes of antiretroviral medications, and is currently being studied to identify the appropriate dose. Preliminary results show that between 56% and 72% of the class-experienced patients in the study had viral loads less than 50 copies/mL after 16 weeks on the drug in combination therapy. Gilead's integrase inhibitor is being studied in patients to identify effective dosages. It's still too early to predict how these drugs will perform in large studies but it's very exciting to have another class of antiretroviral medications in our fight against this disease.

Structured treatment interruptions: a bad idea

Researchers provided an update on the SMART (Strategies for Management of Anti-Retroviral Therapy) study, which was designed to see whether drug exposure, and therefore possibly drug toxicities, could be reduced and yet still keep viral loads down. A group of 5,500 patients participated. Half of them took continuous therapy. The other half would stop treatment when their CD4 was over 350 and go back on treatment when it fell below 250. The SMART study was supposed to last for nine years, and was the largest trial on any aspect of HIV to date, but was stopped in January 2006 after only two years of follow-up.

The reasons for stopping this trial early were that there were more deaths and AIDS-related events occurring in those using structured treatment interruptions compared to those using continuous therapy. There were also more serious heart, liver and kidney problems in the structured

treatment interruption group. This is exactly contrary to the thinking behind the SMART study, which was that continuous treatment would produce more serious drug related events and that treatment interruptions would reduce them.

The study demonstrates that "drug holidays" or structured treatment interruptions can cause harm and that once therapy has been started, patients do better if they stay on their meds. Structured treatment interruptions have to be carefully considered on an individual basis. The need to stop medications because of side effects has been greatly diminished with the advent of once-a-day treatments, lower pill burdens, and a greater understanding of some toxicities.

Sexual transmission of hepatitis C: more common than expected

Too many people think they're safe from hepatitis C infection (HCV) if they don't use needles. A study was presented reporting sexual transmission of hepatitis C infection in almost 240 HIV-positive gay men in London and Brighton between 2002 and 2005. Researchers identified 111 HIV-positive men who were diagnosed with acute hepatitis C infection. Only 17% of these men had used intravenous drugs in the previous 12 months, and therefore the transmission route had to be sexual. A questionnaire was sent to these HIV & HCV co-infected patients and to patients who were only infected with HIV.

The results are important for HIV+/HCV- people. HIV/HCV co-infected patients reported more sexual partners than the HIV patients without HCV: 30 versus 10 in the preceding 12 months. They were more likely to meet in saunas or sex clubs, and were seven times more likely to use the Internet as first point of contact. There was more unprotected receptive and insertive anal intercourse, fisting and the use of sex toys that can injure the mucosa (or lining) of the anus, group sex, and sexual activities under the influence of drugs among those with both HIV and HCV than in the HIV-only group.

The researchers conclude that high-risk and mucosally traumatic sexual experiences are significantly associated with the transmission of hepatitis C. It is therefore extremely important that HIV-positive patients keep on practicing safe sex to protect against infection with hepatitis C. **R**