



in the news

CR^OI
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14th Conference on Retroviruses
and Opportunistic Infections

New meds for resistant virus show good results

Study results of two new medications, the integrase inhibitor raltegravir and the CCR5 inhibitor maraviroc, were presented at the conference. All of the volunteers participating in the trials had previously developed resistance to currently available antiretroviral medications

(ARVs). Most people with resistance to all three existing classes of ARVs who took either maraviroc or raltegravir achieved an undetectable viral load in the short term. (For more on this subject, see articles by Dr. Tremblay and Dr. Kasper on pages 4-7 of this issue).

The 14th Conference on Retroviruses and Opportunistic Infections (CROI) was held in Los Angeles in February 2007. This year once again, important study results were presented. Relay Editor-in-Chief **Dr. Jean-Guy Baril** was there.

How to avoid lipoatrophy

The ACTG 5142 trial looked at the likelihood of different drug combinations producing lipoatrophy, a wasting of the subcutaneous fat (fat under the skin) in the face, arms, legs and buttocks. The study compared the effectiveness and side effects of drug regimens based around lopinavir/ritonavir (Kaletra[®]) and efavirenz (Sustiva[®]), given together or separately with lamivudine (3TC) and either AZT (zidovudine, Retrovir[®]), D4T (stavudine, Zerit[®]) or tenofovir (Viread[®]). People who had lost at least 20% of the subcutaneous fat in their arms and legs after 96 weeks of therapy (as measured by low-dose x-ray, or DEXA, scan) were considered to have lipoatrophy, regardless of their physical appearance. Though lipoatrophy wasn't always

visible, the fat-loss mechanism was in progress in these people.

The study demonstrated that those who received D4T or AZT experienced fat loss more often than those who received tenofovir. As well, the effects of D4T and AZT were greater if these drugs were taken alongside efavirenz than alongside lopinavir/ritonavir.



The study identified the three safest treatment regimens in terms of fat loss. The combination lopinavir/ritonavir/3TC/tenofovir produced the least fat loss; lopinavir/ritonavir/efavirenz came second; and efavirenz/3TC/tenofovir came third. Another study of lopinavir/ritonavir, AZT and 3TC found that eliminating AZT and 3TC after 24 to 48 weeks and continuing with lopinavir alone produced less fat loss in the limbs. These two studies confirm that avoiding D4T and AZT can reduce the risk of subcutaneous fat loss in the limbs, and that taking efavirenz alongside D4T or AZT may increase the risk of lipoatrophy (although the role played by efavirenz remains controversial).

Circumcision and prevention

A major study of mainly heterosexual men in Africa showed that circumcision can reduce the risk of HIV transmission to men by 50%. Of the 5,000 study participants, half underwent circumcision. Two years after they were circumcised, 22 men in this group had contracted HIV, compared to 45 men in the group that had not been circumcised. It's not clear what these results mean in a North American context. Certainly, circumcised men should not take from it a false sense of security.

In Canada, we're seeing a steady increase in the number of new cases of HIV infection, particularly among men

who have sex with men. A study of Quebec lab results analysing resistance to ARVs was presented at CROI. Using tests now run on every newly infected person, researchers could see that 50% of those newly infected had acquired the infection from someone in the primary infection phase (first year of infection). This can be explained by the fact that the viral load is higher during this period, making the infected person more contagious. As well, people usually aren't aware that they're infected in the first few months. **R**