



in the news



Should primary HIV infection be treated?

Primary infection refers to the first few weeks immediately after HIV infection. Until now, there have been no randomized placebo controlled trials demonstrating the risks and benefits of treating people during primary infection with HIV. However, we know that symptoms can be severe and that in the first few days after the virus enters the body there's a rapid though temporary drop of CD4 cells in the blood, as well as a brutal and permanent drop of CD4 cells in the mucous membranes. After just four days, 50% of the memory cells in the small intestine are already infected.

Research results were presented showing that ARV treatment for primary infection given in the first two weeks after seroconversion (the time at which antibodies form against the virus and can be detected in blood tests) and then stopped for a period of 24 months was

associated with a drop in the viral load and an increase in CD4s, while treatment started after this period had fewer benefits and these disappeared after 72 weeks of treatment. Those who started treatment for primary infection later after seroconversion had an increase in the number of CD4 cells and improvement in ability to fight off bacterial infections, but not of anti-HIV function.


Three studies showed that most people consult a doctor about four days after symptoms begin (three weeks following contact with HIV). It would therefore be too late to benefit from ARV treatment for primary infection. We can hope that Dr. Sekaly's discovery, discussed in the last issue of *Relay*, and future developments in specific immune-based treatments will one day be able to help restore the anti-HIV function of the immune system.

The 46th Interscience Conference on Antimicrobial Agents and Chemotherapy took place in San Francisco from September 27th to 30th, 2006. *Relay* Editorial Board member **Dr. Harold Dion** was there.



Over 50s at higher risk

Studies were presented showing that many people over 50 tended to initiate ARV therapy at a more advanced stage of disease than their younger counterparts. A less significant increase in CD4 cells, more rapid progression to AIDS and a lower survival rate were also observed in older people.

There was also a higher rate of depression among over 50s (which impacted quality of life and compliance with treatment), and more side effects and abnormal blood test results for liver and kidney function, for example. People over age 50 who are starting on ARV treatment should have closer medical follow-up in order to prevent the development of medication toxicities: one month after the start or change of ARVs and then every two to three months to monitor for toxicities. Finally, people with more advanced HIV disease and/or the presence of comorbidities (such as hepatitis C) were more likely to be hospitalized. 

STIs may be safe with higher CD4s

An analysis of different clinical studies (STACCATO, TRIVICAN, SMART, WINDOW and ISS/PART) suggests that a brief interruption of ARV treatment to either evaluate viral load or evaluate immune response to a therapeutic vaccine isn't dangerous for people whose CD4 remains between 250 and 350 cells/ μ L during the interruption. As a general rule, however, this type of interruption should only be tried with close follow-up in the context of a clinical trial.

It should also be noted that most studies have found structured treatment interruptions (STIs) inadvisable in chronic infection among people taking ARV therapy. Treatment interruptions can be undertaken for short periods to manage side effects, but their optimal duration is unclear. As the SMART study showed, the risk of disease progression to

AIDS or death was higher after an interruption of four months than in people who continued on therapy, but a shorter interruption may be "safe" in a similar population. The SMART study showed that it may be harmful to wait until the CD4 is 250 before restarting treatment, but other studies are still ongoing to assess whether restarting therapy when the CD4 reached 350 could be safe.

Treatment interruptions among people with chronic infection and resistance to multiple ARVs don't appear to offer any benefits in terms of viral load or overall health and should generally not be undertaken. There are, however, some data showing a benefit on viral load in stopping a particular medication from a class to which the virus has accumulated a number of resistance mutations.