THE BRIDGE

HAART

Old debates revisited

The advent of HAART has shattered accepted ways of thinking and acting in the face of the HIV epidemic, said Meurig Horton, a British man whose experience with protease inhibitors has led him to believe he is no longer a "rhinoceros."

Addressing the Thursday afternoon session on the implications of new treatments, Horton said HAART therapy has unravelled a 1980s consensus that AIDS was uniformly fatal. That "social contract," based in part on compassion, promoted tolerance of people with HIV infection, regarding them as members of a doomed species – "human rhinoceroses."

But with more people surviving longer with AIDS, at least in industrialised countries, community reactions to HIV and AIDS are changing, he said. There is a trend in the US, for example, to replace AIDS case reporting with named HIV reporting as a condition for getting government funding. Horton worries about the use and confidentiality of the information – old debates re-visited.

Internet Café volunteer Nathalie Lameloise was called upon to train delegates at all skill levels. More than 800 volunteers worked tirelessly throughout the week. Many thanks, merci mille fois. Jean Patrick Di Silvestro

South

Affordable TB treatments

"Tuberculosis is a big problem and it's increasing," said Paul Nunn of WHO, opening yesterday's session on tuberculosis (TB) prevention and management. Fifteen million persons with TB are co-infected with HIV, 11 million of them in sub-Saharan Africa. Currently, TB management relies on case finding and treatment. "The role of preventive therapy in the South is not yet clear," Nunn said.

Prevention with isoniazid (INH) is cost-effective in sub-Saharan Africa, reported Jensa Bell of Mt. Sinai Hospital, New York. Direct medical costs of isoniazid for six months are CHF171 per year of life saved. When you include the social costs of TB and prevention of secondary cases, INH prophylaxis saves money: initial investment is CHF34.50 per person treated, while cost averted is CHF36.24 per person treated. "This shows that preventive therapy for TB is a cost-effective way of extending healthy life of HIV-infected patients and of controlling TB in developing countries," Bell said.

Mary Mulindwa, of the Joint Clinical Research Centre in Kampala, Uganda, evaluated reasons for non-adherence to TB preventive regimens in a clinical trial. Major reasons for missing scheduled clinic visits were transport difficulties, caring for a sick family member, change of address without telling the home visitor and stigma of being seen with a health worker. Steps to counter these obstacles need to be devised, she said.

Richard Chaisson of the CPCRA004/ACTG177 study group reported results from a trial comparing prevention with INH for 12 months to rifampin (R) plus pyrazinamide (P) for two months in 1600 tuberculin-positive, HIV-positive persons without active disease in the US, Mexico, Brazil and Haiti. Patients took drugs at home without supervision. "Effective therapy" with INH was considered to be at least six months of continuous adherence; two-thirds of patients met this standard. Adherence with R/P was 80%. Over three years, confirmed TB cases were equivalent between the two regimens, 19 with R/P and 26 with INH, showing that both prevent TB in these patients. However, Chaisson noted, "Cost and feasibility [of R/P] in resource-poor settings is an important consideration."

Hit hard, hit early, stop? Controlled trials needed

"Complete HIV eradication is not required. The immune system can control HIV." This bold statement comes from American Bruce Walker who says this is the most important lesson from his research on anti-HIV immunity. But to achieve this: "acute HIV infection should be treated immediately, pre-seroconversion, with potent antiviral therapy."

Current emphasis on viral eradication stems from the predominance of virologists in HIV research, Walker said. "We need to bridge the gap between immunologists and virologists," he added.

Walker's analysis of the immune system of the "Berlin patient," an HIV-positive man who has undetectable plasma virus 18 months after stopping therapy, supports his conclusion. This patient has the kind of immunity that Walker thinks is necessary to keep HIV in check. His evidence suggests that such immunity might be attainable in all HIV-infected persons.

Previously Walker reported that long-term nonprogressors (LTNP) have CD4 cells called cytotoxic lymphocytes (CTLs) specifically directed against HIV antigens. Generation of CTLs also correlates with control of viremia early after infection. Yesterday he reported that HIV suppression depends on virus-specific CD4 T-helper cells, which are essential to generate HIV-specific CTLs.

But, Walker stressed the difficulty is protecting T-cells during acute infection. He proved this is possible in twelve persons identified with acute infection and treated with HAART prior to seroconversion. Viral RNA became undetectable in all. By two to three months, HIV-specific T-helper cells appeared; by six months, this response became "quite strong" in several individuals. As predicted, virus-specific CTLs also arose. "Every infected patient has the ability to generate HIV-specific T-helper cells," Walker concluded. "We can predictably preserve this response by treating early during infection."

Can therapy be discontinued in persons with undetectable virus and a strong CTL response? "I'm in no way advocating that people treated early stop therapy," Walker stressed. "But we could do a controlled trial."