

POSTER PRESENTATION

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Pro-viral DNA and antiretroviral treatment simplification

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The question of Highly Active Antiretroviral Treatment (HAART) simplification is important due to long term toxicity and cost of HAART.

Pro-viral HIV DNA associated with Peripheral Blood Mononuclear Cells (PBMC) is a marker of the HIV reservoir which is predictive of the evolution of HIV infection. It remains the only virological quantitative marker detectable during suppressive HAART. A pro-viral DNA > 2.7log before treatment interruption is predictive of a decline of CD4 T lymphocytes after interruption [1].

We measured PBMC's pro-viral DNA in patients treated with triple nucleoside analogue therapy containing zidovudine who had developed severe lipodystrophy and/or metabolic abnormalities. A switch to a nucleoside analogue bitherapy by stopping zidovudine was proposed for patients whose pro-viral DNA was < 2.7 log. We selected 11 patients (mean age 48 years, 5 women, mean duration of infection=10 years, mean CD4 nadir=288/mm³, mean plasma HIV RNA zenith =4,44 log). Patients were on triple nucleoside analogue therapy for 7 years with plasma HIV RNA < 40 copies/ml ; mean CD4 cells = 600/mm³. Mean pro-viral DNA was 2,43 log copies/million PBMC. Treatment was switched to abacavir+lamivudine in 5 patients and emtricitabine+tenofovir in 6.

After switch, with a mean follow up of 40 months, plasma HIV RNA remained < 40 copies/ml without blip and CD4 cells remained stable.

In conclusion, treatment simplification with an analogue nucleoside bitherapy is possible in a selected group of patients who were treated with a triple nucleoside analogue therapy in virological success and had a PBMC's associated pro-viral DNA < 2.7 log before treatment simplification.

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