

**Injecting Drug Use as a Factor Contributing to HIV Infection**

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**The purpose of the study** was to establish the impact of injecting drug use on cellular immunity and to evaluate the significance of drug use as a factor contributing to HIV infection and affecting the course of disease in HIV-positive patients.

**Materials and Methods.** The study included 144 subjects: 109 patients (49 - with drug addiction, 23 - with HIV infection, 37 - with drug addiction and HIV infection) and 35 virtually healthy individuals.

**Results.** The total amount of T-lymphocytes does not depend on HIV status, drug addiction or gender, as well as on the combined effect of these factors. The total number of lymphocytes, the percentage and the absolute count of B cells (CD19 + lymphocytes) and CD4 +25+ cells (mainly T-regulatory lymphocytes) in blood was significantly lower in HIV-positive patients compared to HIV-negative ones; drug addiction and gender do not have a significant effect on these parameters. Injecting drug use potentiates the effects caused by HIV infection: reduced percentage of T-helper cells (CD4+lymphocytes), number of T-NK-cells (CD3+16+56+ lymphocytes), percentage and absolute count of NK cells (CD3-16+56+ cells), increased percentage of cytotoxic T lymphocytes (CD8+cells), percentage and absolute number of T-lymphocytes with signs of activation (CD3+HLA-DR+ cells).

**Conclusion.** Injecting drug use increases the risk of infection in HIV-negative IDUs and reduces the antiviral response in HIV-positive patients, significantly potentiating effects of HIV infection: reduced blood level of T-helpers, T-NK and NK cells, regulatory cells, immune hyperactivation – all of this may contribute to the disease progression.