EXPERIENCE OF ANTIRETROVIRAL TREATMENT IN GEORGIA

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SUMMARY

Introduction: HIV infection is the major public health, social and economic problem in Georgia. Although the HIV epidemic is in its nascent phase in the country, the potential risk for development of a widespread HIV epidemic is very high.

The aim of this study is to evaluate the effectiveness of ARV treatment principles in Georgia, including treatment and monitoring methods.

Materials and Methods: The study included 985 people living with HIV/AIDS in Georgia registered at Infectious Disease, AIDS and Clinical Immunology Research Center since 2004. To ensure universal access to ARV therapy all HIV/AIDS individuals included in the study were investigated by special algorithm, all identified patients requiring ARV therapy were offered treatment and monitored during therapy on treatment effectiveness and side effects.

HIV-1 RNA in plasma was measured by quantitative Polymerase Chain Reaction. For determination of percentages and absolute count of T-lymphocyte subpopulations single-platform immunophenotyping technique using the Becton-Dickinson FACSCalibur flow cytometer was applied. For resistance testing TRUGENE HIV-1 Genotyping Kit with the OpenGene DNA Sequencing System (Siemens) was used. Reasons of treatment failure and mortality rate among ARV treated patients were analyzed.

Results and Conclusions: Treatment was offered to 398 HIV/AIDS patients. 397 patients started treatment, 1 patient refused. Out of 397 HIV/AIDS patients treated 21 patients discontinued, 54 patients died and 322 patients are currently on ARV treatment. Out of the treated patients 281 adults and 11 children are receiving first-line treatment, 27 adults and 2 children are on second-line treatment and 1 adult is receiving salvage regimen. Treatment failure was defined in 52 cases. Among them immunological failure was observed in 7 cases, clinical failure in 1 case and virologic failure in 44 cases. Prevalence of drug resistance among virologic failure cases accounted for 73% and inadequate adherence for 27% cases. Out of drug resistance cases 3% has three-class drug resistance, 84% – two-class drug resistance and 13% found to be resistant to one class. In ARV naive patients the prevalence of drug resistance to any class was 4.33%. The majority of death cases among ARV treated patients was due to non-AIDS related or incurable conditions, while deaths due to AIDS related conditions were mainly associated with delayed referral of patients in already advanced stage of disease. It's worth to mention that the highest number of death cases was due to liver failure in HIV/HCV and/or HBV co-infected patients.

Key words: HIV/AIDS, ARV treatment, drug resistance, fatality, Georgia

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