

ABSTRACT

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Title: HIV – development of diagnostics

Bachelor's thesis

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Field of Study: Healthcare Bioanalytics, medical laboratory technician

Background: The main objective is to write information about HIV since its discovery through the clinical picture, treatment, effective prevention methods, methods of laboratory diagnosis and clarification of its development.

Main findings: This work deals with the HIV virus, which was discovered in the eighties of the 20th century and causes AIDS. AIDS remains incurable, despite all the efforts of research teams. Thanks to modern medicines is life with HIV / AIDS more comfortable. The number of cases of HIV infection in Czech Republic and in the world is growing each year. The most effective fight against this infection is still epidemiological preventive and repressive measures. Relatively soon after the discovery of the virus specific laboratory diagnostics has been found. ELISA tests are becoming central domain of the diagnosis, even though over the years has undergone several modifications. For the diagnosis of the disease is important direct and indirect laboratory diagnostics, indirect methods of diagnosis, based on the detection of antibodies, which is used the most. The main methods in the laboratory diagnosis of HIV are ELISA, Western Blotting, Plasma viral load and molecular - biological methods.

Conclusions: Laboratory diagnostics since the discovery of HIV has advanced significantly, HIV infection can be diagnosed earlier and faster. Despite significant advances in modern science HIV infection can't be cured. Using the latest drugs we can slow its progression and improve the lives of the infected. Despite all epidemiological measures the number of cases continues to rise.

Key words: AIDS, HIV, epidemiology of HIV, clinical picture of HIV, HIV prevention, HIV treatment, development of HIV diagnostics, laboratory diagnostics of HIV, ELISA, Western blotting