THE IMPACT OF ANTIRETROVIRAL THERAPY REGIMENS WITH NICAVIR AND TENOFOVIR ON THE LEVEL OF VIRAL LOAD IN THE ACUTE STAGE OF HIV INFECTION

Elvira Ivanova[1], Natalia Vorobiova[2]

[1] Perm Regional Center for AIDS and Infectious Diseases, Perm
[2] Academician Ye. A. Wagner State Medical University
26 Petropavlovskaya str., Perm, Russia

The experience of using nicavir, whose virological efficacy is proven in previous studies [1], and tenofovir in the first-line antiretroviral therapy of the acute stage of HIV infection is presented [2,3].

Materials and methods. Diagnostics and treatment of 6 patients in the acute stage of HIV infection was carried out followed by observation for 8–12 weeks. All patients began to receive antiretroviral therapy (ART) of the first line in the 2NIOT and 1 NNRTI.

Results and its discussion. The diagnosis of HIV infection for all patients was established on the basis of laboratory tests: two-time ELISA, PCR with the determination of HIV proviral DNA, HIV RNA against a negative immune blot test (IB) in three cases and detection of env41 protein also in 3 cases. Further diagnoses were confirmed by the method of IB with the detection of antibodies to HIV-1 proteins with an interval of 4–28 days between the studies.

The 1st observation group (3 men S., P., T. at the age of 56, 31 and 30 years old) received the scheme with nicavir in therapeutic doses — 2 tablets of 200 mg twice a day — in combination with lamivudine and efavirenz. Patients in the 2nd comparison group of 3 (1 woman O. 38 years and 2 men H. and K. 24 and 30 years) were assigned combined ART with the inclusion of tenofovir in combination with lamivudine and efavirenz. All preparations were used in standard dosages. The baseline level of HH RNA of HIV in patients of both groups was from 3 000000 to more than 10 000 000 copies/ml. In the group of patients receiving ART with the inclusion of niacavir, the rate of decrease in the HV RNA of HIV for 4 weeks of treatment was on average 3,846 log10; in the comparison group — by 3.387 log10.

Thus, the rate of decrease in viral load was comparable in both study groups, in the 1st group there is a tendency to a faster decrease in the index.

Conclusions. Rapid reduction in the level of viral load — after 4 weeks from the start of therapy (an average of 3.846 log10 and 3.387 log10 in the 1st and 2nd groups, respectively). Moreover, in patients of the 1st group there is a tendency to a more rapid decrease in the index.

REFERENCES

1. **Ivanova E.S., Shmagel N.G., Vorobyova N.N.** Nikavir in Chemoprevention Regimens of Vertical HIV Transmission // Ed. FysonHananiaKasenga, Publ.: InTec. – DOI: 10.5772/24428.
2. Acute stage of HIV infection. Available on: http://o-spide.ru/way/ostraa-stadia-vic-infekcii
3. **Huynh K., Whitten R. A.** HIV, Testing. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Feb 24. PMID: 29489226.