was combined with leukocyturia. It should be noted that in more than half of patients transient abacterial leukocyturia was recorded - more often at PU ≤1.0 g / day.

Thus, kidney lesions in HIV-infected are most often characterized by tubulointerstitial lesions. At the same time, glomerular kidney lesion, which is much less common, is accompanied by a significantly higher level of HIV RNA.

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CHARACTERISTICS OF HIV LOAD IN VARIOUS TISSUES OF AN INFECTED ORGANISM

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The issues of replication and HIV concentration in various tissues and biological fluids remain inadequate. The viral load of cerebrospinal fluid and serum does not always correlate. Despite the general pattern - a lower HIV concentration than in blood and a decrease of the virus in biological fluids against successful ART, there is evidence of discordant results from viral load in the blood and other biological samples from the same patient.

Objectives – literature materials of the HIV load in various tissues of the infected organism are analyzed.

In a WIHS cohort study, HIV isolation from the cervicovaginal secretion of women receiving ART with a suppressed viral load in the blood it was found that 22 of 59 (37%) women had at least a single virus manifested in cervicovaginal excretion despite the blood suppression. Women used to be potentially dangerous without being suppressed virus in the blood.

HIV can be detected in sperm with undetectable viral load in plasma. In two experiments, simultaneously the virus was found in the semen of 12 of 25 (48%) producers despite undetectable blood load, including more than 5,000 copies of RNA / ml in 4 patients (16%). Isolated HIV discovery was noted in semen obtained during 19 visits out of 116 (14%). Of the 13 patients with prolonged suppression of the virus in the blood (average - 126 months), it was found that the virus was detected in semen, which developed in 4 people (31 %). It has been found that the increase of viral load in the sperm of the same man may have the nature of sporadic bursts. In another study, 5% of patients had a sperm virus, despite an "undetectable" blood load over the last 6 months. Thus, although effective ART repeatedly reduces the risk of transmission of HIV through sexual contact, there is no complete guarantee of safety, even with prolonged suppression of HIV in the blood.

A great deal of research has involved determining the amount of HIV in CSF. In the study of Ph. Chan, using an ultra-sensitive viral load detection method (lower limit of 2 copies / ml), found that patients with complete HIV suppression in the blood and HIV presence in the cerebrospinal fluid (range 2-50 copies / ml) showed worse results than psychological testing those who have the virus both in the blood and in the cerebrospinal fluid have been completely depressed. The results of the study of the correlation between the amount of HIV in the cerebrospinal fluid and the blood plasma are different: some researchers find a correlation, while others find no statistically significant correlation between these indicators. Examining the amount of HIV in the CSF of patients with neurocognitive disorders, most researchers found a higher viral load compared to patients without symptoms of CNS dysfunction. According to B. B. Gelman et al., among patients with neurocognitive disorders, the load of HIV in CSF was higher by 2.48 lg copies / ml than in patients without neurocognitive dysfunction. However, no correlation was found in a study by another group of researchers on the level of HIV load in blood and CSF as predictors of the development of HIV-associated dementia.

Thus, according to the literature, it is possible to form conditions for selective replication and selection of HIV-resistant variants in tissues where drug concentrations are reduced. Such reservoirs become a source of genetically diverse variants of the virus and disease progression, despite the effectiveness of therapy, and contribute to the microevolution of the virus by increasing resistance to the immune system and antiretroviral drugs.