Abstract

of disease in these patients are largely influenced by comorbidities, mainly with chronic viral hepatitis. The high frequency of coinfection is caused, first of all, by the same transmission mechanisms of these infections, especially among injecting drug users (IDUs). The proportion of co-infected with HCV in this category of patients, intravenous drug users, is from 70 to 90%, which causes additional problems in treating these diseases.

Interaction between viruses themselves and between antiviral drugs is very complex and not fully understood. However, the use of HAART contributes to a significant increase in life expectancy of infected and co-infection with HCV, increases the risk of liver damage (it accelerates fibrosis, and development of HCC and CPU), so mortality from these diseases in these patients at the present stage is so high that identifies the problem of HCV therapy. It is known that the presence of RVR and EVR is the most important predictor of HIV-infected patient's treatment efficacy that receive concomitant HAART and HCV treatment, and the outcome of therapy depends on the use of specific drugs from the NRTI group. The aim of the study was to determine the effectiveness of viral response during the first 12 weeks of treatment in patients with chronic hepatitis C and HIV infection.

Results: In 2014, 15 patients with HCV in HIV infection started the therapy. Of these, there were 13 men and 2 women . Genotype 1 HCV RNA recorded in 10 patients (66.7%), 3a - in 1 (6.6%), 3ab in 4 patients (26.7%). The level of fibrosis was not determined. Rapid viral response was obtained in 4 patients (26.7%), early viral response - in 6 (40%). After 24 weeks of treatment there were 9 patients (60%) with negative PCR, while HCV RNA was determined in 2 patients (13.3%), in 1 patient PCR was not studied. 10 patients (66.6%) successfully completed the treatment with a SVR, 2patients are continuing the treatment. 3 patients discontinued therapy, of whom 2 - after 12 weeks of treatment in the absence of any effect of antiviral therapy, and 1 because of identified comorbidity (active tuberculosis).

Conclusions: The majority of HIV-infected patients receiving HAART, HCV antiviral therapy during the first 12 weeks were successful, which is extremely important for the further prognosis of such patients.

No conflict of interest

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Treatment Issues - Hepatitis _ HIV coinfection

Spread of HIV/hepatitis coinfection in the structure of HIV/aids mortality

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Background: Common routes of transmission of viral hepatitis (B and C), increased number of injecting drug users and people having unprotected and casual sex led to a significant increase in the number of patients with coinfection of HIV / hepatitis. Therefore, the investigation of influence of HIV/viral hepatitis co-infection on the course and mortality of both viral diseases is important. So, the goal of the research was to analyze the prevalence of chronic viral hepatitis in patients with HIV infection and the impact of HIV / hepatitis coinfection on mortality rates of patients

Materials & Methods: Retrospective analysis of the structure of lethal cases of HIV / AIDS during 2011-2013 years was performed; their autopsy was conducted in Dnipropetrovsk City Hospital #21. In total 250 case histories were analyzed.

Results: In 2011, the total number of lethal outcomes among hospitalized patients with HIV-infection was 72 people. Of these 29 cases (40.3%) had co-infection and related liver disease (hepatitis B and C). In 2012, the number of lethal outcomes was similar (72 patients), of them 23 cases included coinfection (31.9%). In 2013 number of lethal outcomes among patients with HIV infection significantly was less (43 patients). nevertheless the proportion of co-infection (hepatitis B and C) increased to 41.8% (18 patients). In majority of cases autopsy was established liver injury and fibrosis of different degree; cirrhosis was established in 14% of cases. In 22% of lethal cases among HIV /

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hepatitis co-infection liver damage was also caused by other reasons: 60% had history of drug using, drug toxicity or opportunistic infections. 30% of all patients were receiving ART, 65% were exposed to TB therapy.

Conclusion: Results of the performed analysis show that co-infection of HIV / AIDS with viral hepatitis B and C is presented in significant part in total mortality structure. This trend is existing currently and during recent years. The presence of co-infection complicates the course of both infections and promotes more rapid progression of liver disease. The risk of unfavorable outcome is increased by such factors as drug use or use of hepatotoxic medicine. It is necessary to pay more attention to timely diagnosis of HIV / hepatitis B co-infection with the purpose of timely treatment of the patients.

No conflict of interest

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Treatment Issues - Hepatitis _ HIV coinfection

Influence of antiviral therapy of HIV infection on prevalence of markers of viral hepatitis B and C

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Background: With appearance of antiretroviral therapy (ART), the life quality and length of HIV infected patients has significantly improved. Patients co-infected with HIV / HBV receive ART scheme including nucleoside reverse transcriptase inhibitors (NRTI), 3TC and TDF, with regard to their effect on hepatitis B virus. However NRTI are not acting on hepatitis C co-infection. So, this category of patients requires additional antiviral drugs. To plan the financial costs of the State Program 'Antihepatitis' and

optimize the management of patients with HIV / viral hepatitis co-infection on ART, it is necessary to study the spread of these conditions and their structure in the cohort.

Materials & methods: We analyzed the prevalence of serological markers of HBV and HCV in a cohort of 501 patients with confirmed HIV infection in our clinic.

All patients were conducted clinical and laboratory examination, which included evaluation (CD4), HIV RNA load, biochemical tests, serological markers of opportunistic infections and viral hepatitis B (HbsAg, HbeAg, Ab HBeAg), C (Ab HCV), Ab to hepatitis D. According to WHO classification, 1st disease stage was diagnosed in 9 patients (1.8%), 2nd in 49 (9.8%), 3rd in 164 (32.7%), 4th in 279 (55.7%).

Results: Chronic liver diseases were revealed in 167 patients (33.3%): HCV markers in 53 (10.6%), of hepatitis B in 15 (2.3%), of hepatitis B + C in 48 (9.6%), of hepatitis of unknown etiology in 44 (8.8%), of liver cirrhosis in 7 (1.4%). Patients with viral hepatitis B and C were divided into 2 groups: receiving ART for at least 2 years (1^{st} group, n = 62), without ART $(2^{nd} \text{ aroup, } n = 41)$. The 1st aroup patients received schemes of ART which included NRTI, lamivudine and tenofovir (3TC and TDF) Comparative analysis showed that viral markers of hepatitis B and C are found in 1st and 2nd groups with different frequency. The prevalence of chronic hepatitis B markers among 1st group is 2.9%, which is almost 9 times lower than in the 2nd group (19.1%) (p<0.05). Spread of HCV in both groups (36.8% and 41.2% respectively) significantly exceeded prevalence of HBV (P <0.05). At the same time, the frequency of HCV frequency was mainly similar between 1st and 2nd groups.

Conclusion: It was shown that co-infection of HIV / hepatitis occurs in more than 1/3 of patients. The structure of HIV / hepatitis coinfection in the total cohort shows prevalence of HCV-infection. Less frequently mixed infection (HBV + HCV) and monoinfection are seen. The prevalence of chronic hepatitis B was significantly lower in patients receiving ART, which indicates the effectiveness of ART in two directions, to restrict replication of HIV and HBV. Obtained results allow more effective management of patients with HIV / HCV and/or HBV co-infection.

No conflict of interest