



COMPLEX TREATMENT OF PATIENTS WITH CHRONIC VIRAL HEPATITIS C

Rakhimova Aziza Fakhriddinovna

Bukhara University of Innovative Education and Medicine, Student
raximovaaziza27@gmail.com

Abstract

The article presents an analysis of clinical manifestations, laboratory parameters, the nature and frequency of adverse reactions, and the frequency of a positive virological response in 20 patients with chronic viral hepatitis C (HCV) who received combined antiviral therapy with peginteron and ribavirin with the inclusion of a hepatoprotector, 2 tablets 3 times a day, for 3 months compared with a control group of HCV patients who were prescribed similar antiviral therapy without a hepatoprotector. It was found that after treatment in the main group of patients, clinical manifestations of hepatitis were relieved 7-10 days earlier, cytolytic syndrome normalized, a positive virological response increased by 20%, and the frequency of severe adverse reactions of interferon therapy requiring treatment interruption decreased by 10%.

Keywords: Liver damage, clinical manifestations, liver function tests, cirrhosis, hepatoprotector

Relevance

The problem of chronic viral liver damage remains extremely relevant, this is due to the high prevalence and difficulties in treating this pathology. In particular, according to American authors [5], more than 3.2 million people in the USA suffer from chronic viral hepatitis C (HCV), and the main cause of the disease is drug use. Treatment of HCV still presents great difficulties, which is associated with an insufficiently satisfactory procedure for achieving the degree of virological response [3], high cost of treatment [3-6] and a high frequency of complications of interferon therapy [7-9]. Therefore, along with etiotropic therapy for the restoration of the liver parenchyma, drugs have begun to be



included in the antiviral treatment regimen for HCV, which are united by the general concept of hepatoprotectors [4-6]. Specialists pay special attention to hepatoprotectors of plant origin [4], as a rule, in addition to individual intolerance, do not give side effects. Therefore, the aim of this study is to evaluate the efficacy and tolerability of the hepatoprotector Livomed from Harasha (India) in the treatment of patients with HCV.

Material and methods

The study included 20 HCV patients aged 19-37 years, 15 men, 5 women (Group 1). They received combination antiviral therapy: pegylated interferon (INF) at a dose of 150 to 180 mcg subcutaneously once a week and ribavirin at a dose of 800 mg to 1000 mg per day depending on body weight, virus genotype and viral load, as well as additionally the hepatoprotector Livomed 2 tablets 3 times a day for 3 months. The 2nd group of HCV patients (control) included 10 people of comparable age who received a similar antiviral course of treatment without the inclusion of a hepatoprotector.

Verification of the HCV diagnosis was carried out using clinical manifestations, laboratory, instrumental and histological studies. All patients underwent a general clinical blood test (hemoglobin, erythrocytes, hematocrit, leukocytes, platelets, blood formula), biochemical studies (ALT, AST, glucose, total and direct bilirubin, albumin, alkaline phosphatase (ALP), γ -glutamyl transpeptidase (γ -GTP), creatinine, iron), viral markers - anti-HCV (enzyme immunoassay) and HCV RNA (qualitatively and quantitatively using polymerase chain reaction) in the molecular diagnostics laboratory of the Central Research Institute of Epidemiology. Patients were comprehensively examined upon admission, i.e. before treatment, 2 and 3 months after treatment.

Results and discussion

Of the clinical manifestations, the most frequently recorded was asthenovegetative syndrome (90%), which was expressed by general weakness, sleep disturbance, sometimes irritability, less frequently diagnosed (70%) was dyspeptic syndrome, which was accompanied by decreased appetite, nausea,



Modern American Journal of Medical and Health Sciences

ISSN (E): 3067-803X

Volume 01, Issue 03, June, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons Attribution 4.0 International License.

unstable stool. Pain syndrome was observed in 10 (33.3%) patients, mainly in the form of a feeling of heaviness in the right hypochondrium, less often dull pain after physical exertion. Hepatomegaly was noted in 15 (50%) patients, splenomegaly in 9 (30%) patients. Cytolytic syndrome in the form of aminotransferase activity on average exceeded normal values by 2-3 times, the activity of cholestasis enzymes: alkaline phosphatase and GGT by 1.5-2 times, total bilirubin was increased by 2.5 times compared to the norm due to both indirect and direct fractions, the albumin content was normal. All "general clinical blood test parameters before treatment were also within normal limits.

In the main (1st) group of patients, both cytolytic syndrome and cholestasis enzymes and serum bilirubin levels returned to normal 3 weeks after the start of treatment, while in the control group they returned to normal after 1 month. In addition, as a result of treatment, HCV RNA disappeared in 18 (90%) patients of the 1st group after 2 months, and in 2 (10%) patients the therapy was ineffective. As for the control group of patients, a positive virological response was obtained in 7 (40%) patients after 3 months of treatment, and in 3 (30%) patients the therapy was unsuccessful. An analysis of the complications that developed in patients of both groups is given .

In 100% of cases, flu-like syndrome and fever were observed in both groups. As for other adverse reactions of interferon therapy, they already differed in the studied groups of patients. In particular, leukopenia was observed 30% more often, and thrombocytopenia 25% more often in the control group of patients. In the same group, arthralgia was 20% more common, hair loss 15%, muscle and headaches 20 and 25%, respectively, nausea 25%. In addition, in 1 (10%) patient who responded to INF after 2 months of treatment, the therapy was discontinued due to severe fever up to 39.5°C for each interferon injection, despite preliminary administration of paracetamol. No adverse reactions were observed in patients of the 1st group who received Livomed. Clinical improvement of the general well-being of patients in the 1st group also occurred earlier than in patients in the control group. In particular, 7-10 days earlier, patients in the 1st group noted a decrease in general weakness, normalization of sleep and stool, and the liver and spleen also contracted.



Conclusions

1. The use of a hepatoprotector in complex antiviral therapy of patients with viral hepatitis C (RNA+) increases the positive virological response to treatment by 20% and reduces the incidence of severe adverse reactions to interferon therapy requiring treatment interruption by 10%.
2. The hepatoprotector is well tolerated by patients, and its positive effect is due to the improvement of the functional state of the liver, as evidenced by earlier, on average by 7-10 days, relief of clinical manifestations of hepatitis and normalization of cytolytic syndrome, in connection with which it can be recommended as an additional drug in the course of antiviral therapy for hepatitis C.

References

1. Vorobyova N. N., Myshkina O. K., Nikolenko V. V., et al. Pathogenetic therapy of parenteral viral hepatitis. *Russ. J. Gastroenterol., Hepatol., Coloproctol.* 2007; 17 (1): 23.
2. Gladin P. A., Bechikova A. V., Kolpakov M. A. A case of a side effect of peginteron in the form of encephalopathy with memory disorders. *Rus. J. Gastroentr. Hepatol., Coloproctol.* 2007; 17 (1): 24.
3. Ivashkin V. T. Diseases of the liver and biliary tract. Guide for doctors. M.: OOO "Izd. dom M. - Vesti"; 2002.
4. Paymanov N. V., Gerasimova V. P., Orlov A. E. Use of OVO-D in the treatment of chronic viral hepatitis.; *Rus. J. Gastroenterol., Hepatol., Coloproctol.* 2007; 17.: (1): 37.
5. Armstrong GZ, Wasley A, Simard et al. The prevalence of hepatitis C virus infection in the United States, 1999 through. 2002. *Ann. Intern. Med.* 2006; 144: 705-741.
6. Melhem A., Stem M., Shibolet O. et al, Treatment of chronic hepatitis C virus infection via antioxidants. Results of a phase clinical trial. *J. Clin. Gastroenterol.* 2005; 39: 737-742.
7. Okanue L, Sakamoto S, Iton Y et al. Side effects of high-dose interferon treatment for chronic hepatitis C. *J. Hepatol.* 1996; 25: 283-291.



8. Ibrokhimovna, M.M. (2024). Improvement of Primary Prophylaxis and Treatment of Spontaneous Bacterial Peritonitis Complicated in Virus Etiology Liver Cirrhosis. *Journal of Intellectual Property and Human Rights* , 3 (4), 19–25. Retrieved from <http://journals.academiczone.net/index.php/jiphr/article/view/2506>
9. Elmurodova A. A. (2023). Viral Hepatitis Delta: An Underestimated Threat. *Texas Journal of Medical Science* , 26 , 1–3. Retrieved from <https://zienjournals.com/index.php/tjms/article/view/4610>
10. Oblokulov Abdurashid Rakhimovich Mukhammadieva Musharraf Ibrokhimovna Sanokulova Sitara Avazovna Khadieva Dora Isakovna. (2023) CLINICAL AND LABORATORY FEATURES OF SPONTANEOUS BACTERIAL PERITONITIS IN PATIENTS WITH VIRAL LIVER CIRRHOSIS. *Journal of Advanced Zoology*, 44(S2), 3744–3750. Retrieved from <http://www.jazindia.com/index.php/jaz/article/view/1716>
11. Mukhammadieva MI (2022). Modern clinical and biochemical characteristics of liver cirrhosis patients of viral etiology with spontaneous bacterial peritonitis // *Texas Journal of Medical Science*. – 2022.- P. 86-90
12. Abdulloev Mukhriddin Ziyodulloevich. (2023). Modern Therapy of Viral Hepatitis. *Texas Journal of Medical Science*, 26, 66–69. Retrieved from <https://www.zienjournals.com/index.php/tjms/article/view/4636>
13. Nabiyeva, Z. . (2023). CLINICAL MANIFESTATIONS OF CHRONIC DISEASES OF THE DIGESTIVE SYSTEM ORGANS IN CHILDREN. *Innovative research in the modern world: theory and practice*, 2(15), 27–28. retrieved from <https://in-academy.uz/index.php/zdit/article/view/13239>
14. Mukhammadieva MI (2023). Virus etiologyli gigar cirrhosis bemorlarida spontaneous bacterial peritonitis bilan asoratlanishning prophylaxis va davosini takomilashtirish // *Oriental Renaissance: Innovative, educational, natural and social sciences*. -2023.-P.947-953.
15. Oblokulov AR, MIMukhammadieva. (2022). Clinical and biochemical characteristics of liver cirrhosis patients of viral etiology with spontaneous



-
- bacterial peritonitis//Academicia Globe: Inderscience Research.-2022.- P. 210-216.
16. Khadieva Dora Isakovna. (2024). Diagnosis and Prediction of Liver Fibrosis in Chronic Viral Hepatitis C in Hiv-Infected. *International Journal of Integrative and Modern Medicine* , 2 (6), 89–94. Retrieved from <https://medicaljournals.eu/index.php/IJIMM/article/view/515>
 17. Karomatov Inomzhon Dzhuraevich, Nabieva Zumrad Tukhtayevna Adaptogen - Eleutherococcus, *Svobodoyagodnik Kolyuchiy* (literature review) // *Biology and Integrative Medicine*. 2017. No. 11. URL : <https://cyberleninka.ru/article/n/adaptogen-eleuterokokk-svobodoyagodnik-kolyuchiy-obzor-literatury> (date of access: 12/19/2023).
 18. Mukhammadieva Musharraf Ibrokhimovna. (2024). TREATMENT OF SPONTANEOUS BACTERIAL PERITONITIS COMPLICATED IN VIRUS ETIOLOGY LIVER CIRRHOSIS. *JOURNAL OF EDUCATION, ETHICS AND VALUE* , 3 (6), 73–80. Retrieved from <https://jeev.innovascience.uz/index.php/jeev/article/view/723>
 19. Sanokulova Sitora Avazovna. (2023). Factors of Development of Hepatorenal Syndrome in Patients with Liver Cirrhosis of Viral Etiology. *Texas Journal of Medical Science*, 26, 4–9. Retrieved from <https://www.zienjournals.com/index.php/tjms/article/view/4611>
 20. Tukhtaboevna, MZ. (2022). ACUTE INTESTINAL INFECTIONS IN CHILDREN, MODERN PRINCIPLES OF CORRECTION AND RESTORATION OF WATER-ELECTROLYTE BALANCE. *IJTIMOYI FANLARDA INNOVASIYA ONLAYN ILMIY JURNALI* , 101–105. Retrieved from <https://sciencebox.uz/index.php/jis/article/view/3249>
 21. Tukhtaboevna MZ Choosing an Antihistamine to Treat Seasonal Allergies // *INTERNATIONAL JOURNAL OF HEALTH SYSTEMS AND MEDICAL SCIENCES*. – 2022. – T. 1. – No. 4. – S. 401-407.
 22. Jalilova, A.S. (2022). THE SPREAD OF CIRRHOSIS OF THE LIVER BY ETIOLOGICAL FACTORS. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2 (6), 253-257.\



-
23. A. A., E., A. S., D., & A., M. S. (2022). Modern Approaches to Treatment of Chronic Giardiasis. *Central Asian Journal of Medical and Natural Science*, 3(2), 102-105. Retrieved from <https://www.cajmns.centralasianstudies.org/index.php/CAJMNS/article/view/631>
 24. Oblokulov, A., & Mukhammadiyeva, M. (2022). CLINICAL AND LABORATORY CHARACTERISTICS OF SPONTANEOUS BACTERIAL PERITONITIS IN LIVER CIRRHOSIS OF VIRAL ETIOLOGY. *Journal of the Vestnik of the Doctor*, 1(3), 66–69. retrieved from https://inlibrary.uz/index.php/doctors_herald/article/view/2016
 25. Oblokulova ZI, Oblokulov AR, & Jalilova AS (2022). Diagnostic Significance of Hepatic Fibrosis in Patients with Extrahepatic Chronic Viral Hepatitis C. *Central Asian Journal of Medical and Natural Science*, 3(3), 438-443. Retrieved from <https://www.cajmns.centralasianstudies.org/index.php/CAJMNS/article/view/806>
 26. Aslonova.MR (2022). Determination of suicidality against the background of Parasitic Diseases in children // *INTERNATIONAL JOURNAL OF PHILOSOPHICAL STUDIES AND SOCIAL SCIENCES*. – 2022.- P. 9-12.
 27. Jalilova, A. S. (2022). Approaches to Etiotropic Therapy of Covid-19 in Outpatient Patients. *INTERNATIONAL JOURNAL OF HEALTH SYSTEMS AND MEDICAL SCIENCES*, 1(1), 41-44.
 28. Mukhtarova Sh.A. (2022) Age-related features of clinical manifestations of giardiasis // *International journal of medical sciences and clinical research* 2022;17-21.
 29. Jalilova AS (2022). FEATURES OF CLINICAL MANIFESTATIONS OF CYTOMEGALOVIRUS INFECTION IN CHILDREN. *International Journal of Medical Sciences And Clinical Research*, 2(09), 12–16. <https://doi.org/10.37547/ijmscr/Volume02Issue09-04>
 30. Raximovich, O. A., Sadillovayeva, J. A., Abdulloyeva, M. S., & Farxodovich, R. F. (2022). Microbiological Indicators of Patients with Confirmed Sars-Cov-2 - Infection. *Central Asian Journal of Medical and*



-
- Natural Science, 3(2), 289-294. <https://doi.org/10.17605/OSF.IO/9CFP6>
31. Zhalilova A. S. Dilnoza Sayotovna Kosimova. Clinical and Laboratory Characteristics of Patients with Covid -19 and Predictor of Antibacterial Therapy // CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES . – 2021. – P. 81-86.
 32. Abdulloyevna, MS. (2023). Tez-Tez Kasal Bo'lgan Bolalarda O'tkir Respirator Kasalliklarning Klinik-Laboratoriya Xususiyatlari. AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI, 2(12), 29–34. Retrieved from <https://sciencebox.uz/index.php/amalibbiyot/article/view/8680>
 33. Muxtorova, S. A. (2022). Clinical and laboratoriya features of acute respiratory disease in frequently ill children. Web of scientist: International scientific research journal, 1026-1030.
 34. Mukhtarova, S. H. (2022). A.(2022) AGE-RELATED FEATURES OF CLINICAL MANIFESTATIONS OF GIARDIASIS. INTERNATIONAL JOURNAL OF MEDICAL SCIENCES AND CLINICAL RESEARCH, 17-21.
 35. Mukhtarova Shokhida Abdulloevna. (2023). Microbiological Indicators of Patients Infected with SarsCov-2. Texas Journal of Medical Science, 21, 41–45. Retrieved from <https://www.zienjournals.com/index.php/tjms/article/view/4116>
 36. Mukhtarova Shokhida Abdulloevna. (2023). CYTOMEGALOVIRUS INFECTIONS IN CHILDREN WITH PRIMARY AND SECONDARY IMMUNE DEFICIENCIES. Academia Science Repository, 4(06), 23–28. Retrieved from <http://academiascience.com/index.php/repo/article/view/832>
 37. Aslonova.MR (2023). VITAMIN DEFICIENCY CASES RESULTING FROM PARASITIC DISEASES // Galaxy International Interdisciplinary Research Journal.-2023.-P. 404-409
 38. Mukhtarova Shokhida Abdulloevna. (2023). CHARACTERISTIC FEATURES OF THE COURSE OF CITOMEGALOVIRUS INFECTION IN CHILDREN. Galaxy International Interdisciplinary Research Journal,



Modern American Journal of Medical and Health Sciences

ISSN (E): 3067-803X

Volume 01, Issue 03, June, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons Attribution 4.0 International License.

-
- 11(4), 484–487. Retrieved from <https://giirj.com/index.php/giirj/article/view/5150> ..
39. Raximovich, O. A., Sadilloevna, J. A., Abdulloevna, M. S., & Farxodovich, R. F. (2022). Microbiological Indicators of Patients with Confirmed Sars-Cov-2 - Infection. *Central Asian Journal of Medical and Natural Science* , 3 (2), 289-294. <https://doi.org/10.17605/OSF.IO/9CFP6>
40. Sh. A, M. (2023). Prevention of Seasonal Spread of ARVI Among Young Children. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 2(12), 22–28. Retrieved from <https://www.sciencebox.uz/index.php/amaltibbiyot/article/view/8678>
41. M.I., M. . (2024). Features of the Clinical Course of Virus-Associated Glomerulonephritis in Children and Adolescents. *Research Journal of Trauma and Disability Studies* , 3 (10), 163–169. Retrieved from <https://journals.academiczone.net/index.php/rjtds/article/view/3676>