## VIFERON USE IN CHILDREN

## Axmedov Shamshod Jamshidovich

Faculty of Medicine, Asia International University, Uzbekistan

**Keywords:** acute respiratory viral infection, mucous membranes of the upper respiratory tract, local immunity, immunomodulatory therapy, antioxidants, adult patients

## **Abstract**

The results of a study of the clinical and immunological effectiveness of local use of a recombinant preparation of interferon  $\alpha$ -2 $\beta$  (Viferon® ointment) for acute respiratory viral infection (ARVI) of various etiologies in 100 young children are presented. It was shown that the use of a local ointment form of the drug made it possible to reduce the duration of the severity of symptoms of the disease and achieve the elimination of pathogens at the entrance gates of ARVI without systemic effects on the child's immune system. The article provides a comparative analysis of the results of clinical and laboratory studies performed at 10 different medical institutions based on the principles and methodology of evidence-based medicine, which confirmed the reliability of the clinical effectiveness of the use of the drug Viferon® (suppositories, gel/ointment) in the treatment of influenza and acute respiratory viral infections (ARVI) in adult patients. The algorithm included assessment of the antiviral, immunomodulatory, anti-inflammatory, antioxidant effects of the drug in prospective open randomized placebo-controlled clinical and immunological studies and retrospective analysis in accordance with the Rules of Good Clinical Practice. It has been shown that the use of the drug Viferon® in the treatment of adult patients with influenza and ARVI of both viral and viral-bacterial etiology contributes to a statistically significant reduction in the duration of the main clinical symptoms and the entire disease as a whole, reducing the imbalance between the immune and interferon systems, as well as faster elimination of viral antigens. Interferon homeostasis was studied in children with bronchial asthma (BA) at different stages of the disease. The control group consisted of 10 children with no predisposition to atopic reaction. Children with BA showed a disfunction of interferon homeostasis, with a significant decline in the leukocyte ability to produce IFN-alpha and IFN-gamma. The concentration of blood serum IFN-gamma was reduced at all stages of BA, with a more significant decrease during BA attacks than during the remission period. IFN-gamma synthesis disturbances in BA children were stable and resistant to therapeutic treatment by recombinant IFN-alpha2b (Viferon). The concentrations of interferon  $\alpha$  and  $\gamma$ (IFN $\alpha$ , IFN $\gamma$ ) in the blood serum, as well as levels of spontaneous and induced cytokine production data of blood cells of sick children was determined by ELISA. All the

children at the peak of the disease found a dramatic inhibition of cellular immunity and the production of cytokines, which is consistent with the concept of «measles anergy» accepted in the scientific literature. The period of convalescence oppression immunity indices remained, but it was less pronounced in the group of children treated with the drug of human recombinant interferon alfa-2b -Viferon. Clinical efficacy of Viferon in the treatment of patients with measles children characterized by rapid positive dynamics of symptoms of acute period (normalization of body temperature, reducing intoxication, catarrhal symptoms and severity of the syndrome exanthema). It was also found reduction in the incidence of complications, reduction in the average bedday and smooth during the period of convalescence later. Complex treatment also showed a positive effect of antigen-binding lymphocytes for both the small and large intestine tag. In the group of children who received some therapy, there was also a tendency to decline, but not so significant. A positive therapeutic effect was achieved in 93.3% of patients with acute intestinal diseases against the background of complex treatment. The decrease in the symptoms of intoxication was manifested from the 1st day as a result of complex therapy in the main and control groups. In the 2B treatment group, we studied the effects of nifuroxazide with Saccharomyces boulardii on the duration of clinical symptoms. In this group, a very small difference was found when the symptoms of intoxication were compared with the control group.

In patients with invasive diarrhea, there was a decrease in the symptoms of intoxication from the 2nd-3rd days of the disease with the help of the drug nifuroxazide and Saccharomyces boulardii. By the 5th-6th days, however, it approached normal. The positive effect of the use of the drug Saccharomyces boulardii with viferon in complex treatment the effect of nifuroxazide with secretory diarrhea and Saccharomyces boulardii is noted in patients with invasive diarrhea. Against the background of the ongoing complex treatment with the mentioned probiotic, the duration of clinical manifestations characteristic of intoxication syndrome decreases.

## REFERENCES

- 1. Saodat, A., Vohid, A., Ravshan, N., & Shamshod, A. (2020). MRI study in patients with idiopathic cokearthrosis of the hip joint. *International Journal of Psychosocial Rehabilitation*, 24(2), 410-415.
- 2. Axmedov, S. J. (2023). EFFECTS OF THE DRUG MILDRONATE. *Innovative Development in Educational Activities*, 2(20), 40-59.
- 3. Уроков, Ш. Т., & Хамроев, Х. Н. (2019). Influe of diffusion diseases of the liver on the current and forecfst of obstructive jaundice. *Тиббиётда янги кун*, 1, 30.
- 4. TESHAEV, S. J., TUHSANOVA, N. E., & HAMRAEV, K. N. (2020). Influence of environmental factors on the morphometric parameters of the small intestine of

- rats in postnatal ontogenesis. *International Journal of Pharmaceutical Research* (09752366), 12(3).
- 5. Xampoeb, X. H. (2022). Toxic liver damage in acute phase of ethanol intoxication and its experimental correction with chelate zinc compound. *European journal of modern medicine and practice*, 2, 2.
- 6. Gafurovna, A. N., Xalimovich, M. N., & Komilovich, E. B. Z. (2023). KLIMAKTERIK YOSHDAGI AYOLLARDA ARTERIAL GIPERTENZIYANING KECHISHI. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 23(6), 26-31.
- 7. Komilovich, E. B. Z. (2023). Coronary Artery Disease. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, *3*(12), 81-87.
- 8. Эргашов, Б. К. (2023). Артериальная Гипертония: Современный Взгляд На Проблему. *Research Journal of Trauma and Disability Studies*, 2(11), 250-261.
- 9. ASHUROVA, N. G., MAVLONOV, N. X., & ERGASHOV, B. Z. K. БИОЛОГИЯ И ИНТЕГРАТИВНАЯ МЕДИЦИНА. *БИОЛОГИЯ*, (4), 92-101.
- 10. Jamshidovich, A. S. (2023). ASCORBIC ACID: ITS ROLE IN IMMUNE SYSTEM, CHRONIC INFLAMMATION DISEASES AND ON THE ANTIOXIDANT EFFECTS. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, *3*(11), 57-60.
- 11. Jamshidovich, A. S. (2023). THE ROLE OF THIOTRIAZOLINE IN THE ORGANISM. *Ta'lim innovatsiyasi va integratsiyasi*, 9(5), 152-155.
- 12. Jamshidovich, A. S. (2023). HEPTRAL IS USED IN LIVER DISEASES. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *35*(3), 76-78.
- 13. Jamshidovich, A. S. (2023). EFFECT OF TIVORTIN ON CARDIOMYOCYTE CELLS AND ITS ROLE IN MYOCARDIAL INFARCTION. *Gospodarka i Innowacje.*, 42, 255-257.
- 14. Jamshidovich, A. S. (2024). NEUROPROTECTIVE EFFECT OF CITICOLINE. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, *4*(1), 1-4.
- 15. Jamshidovich, A. S. (2024). THE ROLE OF TRIMETAZIDINE IN ISCHEMIC CARDIOMYOPATHY. *Journal of new century innovations*, 44(2), 3-8.
- 16. Ачилов Шохрух Шавкиддин угли. (2024). ХИРУРГИЧЕСКИЕ МЕТОДЫ ЛЕЧЕНИЯ АНЕВРИЗМЫ БРЮШНОЙ АОРТЫ . *TADQIQOTLAR*, *30*(3), 120–126
- 17. Ачилов Шохрух Шавкиддин угли (2023). ОСЛОЖНЕНИЯ ПОСЛЕ КОВИДА НА СОСУДАХ НИЖНИХ КОНЕЧНОСТЕЙ. CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES Volume: 04 Issue: 06 Oct-Nov 2023ISSN:2660-4159, 400-403

- 18. Ачилов Шохрух Шавкиддин угли (2023). НАЛОЖЕНИЕ ШВОВ ПРИ ГНОЙНЫХ ПРОЦЕССАХ НА ТКАНИ. CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES Volume: 04 Issue: 06 Oct-Nov 2023ISSN:2660-4159, 292-297
- 19. Khamroev, B. S. (2022). RESULTS OF TREATMENT OF PATIENTS WITH BLEEDING OF THE STOMACH AND 12 DUO FROM NON-STEROIDAL ANTI-INFLAMMATORY DRUGS-INDUCED OENP. *Journal of Pharmaceutical Negative Results*, 1901-1910.
- 20. Nutfilloyevich, K. K. (2023). STUDY OF NORMAL MORPHOMETRIC PARAMETERS OF THE LIVER. American Journal of Pediatric Medicine and Health Sciences (2993-2149), 1(8), 302-305.
- 21. Nutfilloyevich, K. K. (2024). NORMAL MORPHOMETRIC PARAMETERS OF THE LIVER OF LABORATORY RATS. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *36*(3), 104-113.
- 22. Nutfilloevich, K. K., & Akhrorovna, K. D. (2024). MORPHOLOGICAL CHANGES IN THE LIVER IN NORMAL AND CHRONIC ALCOHOL POISONING. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *36*(3), 77-85.
- 23. Kayumova, G. M., & Hamroyev, X. N. (2023). SIGNIFICANCE OF THE FEMOFLOR TEST IN ASSESSING THE STATE OF VAGINAL MICROBIOCENOSIS IN PRETERM VAGINAL DISCHARGE. *International Journal of Medical Sciences And Clinical Research*, *3*(02), 58-63.
- 24. Хамроев, Х. Н., & Тухсанова, Н. Э. (2022). НОВЫЙ ДЕНЬ В МЕДИЦИНЕ. НОВЫЙ ДЕНЬ В МЕДИЦИНЕ Учредители: Бухарский государственный медицинский институт, ООО" Новый день в медицине", (1), 233-239.
- 25. Хамроев, Х. Н. (2024). Провести оценку морфологических изменений печени в норме и особенностей характера ее изменений при хронической алкогольной интоксикации. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 36(3), 95-3.
- 26. Хамроев, Х. Н., & Туксанова, Н. Э. (2021). Characteristic of morphometric parameters of internal organs in experimental chronic alcoholism. *Тиббиётда* янги кун, 2, 34.
- 27. Хамроев, Х. Н., Хасанова, Д. А., Ганжиев, Ф. Х., & Мусоев, Т. Я. (2023). Шошилинч тиббий ёрдам ташкил қилишнинг долзарб муаммолари: Политравма ва ўткир юрак-қон томир касалликларида ёрдам кўрсатиш масалалари. XVIII Республика илмий-амалий анжумани, 12.
- 28. Хамроев, Х. Н., & Хасанова, Д. А. (2023). Жигар морфометрик кўрсаткичларининг меъёрда ва экспериментал сурункали алкоголизмда

- қиёсий таснифи. Медицинский журнал Узбекистана | Medical journal of Uzbekistan, 2.
- 29. Khamroyev, X. N. (2022). TOXIC LIVER DAMAGE IN ACUTE PHASE OF ETHANOL INTOXICATION AND ITS EXPERIMENTAL CORRECTION WITH CHELATE ZINC COMPOUND. *European Journal of Modern Medicine and Practice*, 2(2), 12-16.
- 30. Xamroyev, X. N. (2022). The morphofunctional changes in internal organs during alcohol intoxication. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 2(2), 9-11.
- 31. Khamroyev, X. N. (2022). TOXIC LIVER DAMAGE IN ACUTE PHASE OF ETHANOL INTOXICATION AND ITS EXPERIMENTAL CORRECTION WITH CHELATE ZINC COMPOUND. European Journal of Modern Medicine and Practice, 2(2), 12-16.
- 32. Xamroyev, X. N. (2022). The morphofunctional changes in internal organs during alcohol intoxication. *EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE*, 2(2), 9-11.
- 33. Латипов, И. И., & Хамроев, Х. Н. (2023). Улучшение Резултат Диагностике Ультразвуковой Допплерографии Синдрома Хронической Абдоминальной Ишемии. *Central Asian Journal of Medical and Natural Science*, *4*(4), 522-525.
- 34. Хамроев, Х. Н., & Уроков, Ш. Т. (2019). ВЛИЯНИЕ ДИФФУЗНЫХ ЗАБОЛЕВАНИЙ ПЕЧЕНИ НА ТЕЧЕНИЕ И ПРОГНОЗ МЕХАНИЧЕСКОЙ ЖЕЛТУХИ. *Новый день в медицине*, (3), 275-278.
- 35. Хамроев, Х. Н., & Ганжиев, Ф. Х. (2023). Динамика структурнофункциональных нарушение печени крыс при экспериментальном алгоколние циррозе. *Pr oblemsofmodernsurgery*, 6.