EXPERIENCE OF USING THE COMBINED DRUG GRIPPOMIX IN PATIENTS WITH UNCOMPLICATED FORM SARS AND FLU

Sayfiyeva Nozima Xikmat xoja qizi[1]
Abdumajidova Nozima Xamidullayevna[2]
Zafarov Muhammadjon Qahramon og'li[3]
[1-2-3]Tashkent Medical Academy, Uzbekistan
https://doi.org/10.5281/zenodo.7543301

Summary: Acute respiratory viral infections (ARVI), including influenza, continue to occupy the first place in the structure of all human infectious diseases and remain one of the most relevant medical problems. For the treatment and prevention of acute respiratory viral infections and influenza, drugs of various groups are used. Among the combined drugs today, the preferred drug is grippomix, the effectiveness and safety of which has been studied in this study. The presence of almost all the necessary active ingredients in a single form used for the complex therapy of acute respiratory viral infections, helped to increase patients' compliance to treatment, facilitating the clinical course of the disease, reducing the risk of complications.

Keywords: ARVI, influenza, treatment, combined drugs, grippomix.

The term "acute respiratory viral infection" (ARVI) includes a large number of diseases. All of them are caused by viruses and manifest similar symptoms. Acute respiratory viral infections are highly contagious (contagious) diseases. People of any age get sick, but children from one to 14 years old get sick more often than adults [5]. ARVI implies vivid symptoms: the first signs are implicit: malaise, broken condition, headache. After 1-2 days, the disease flares up in full force — an infected person has a fever, an acute runny nose forces them to constantly change handkerchiefs, sneezing and coughing infuriate others. This is followed by a decline in acute respiratory viral infections and, if the disease is not complicated by a secondary infection (usually bacterial), the patient recovers within a week even without intensive treatment.

At the same time, along with mild and moderate forms of acute respiratory viral infections that end in recovery, some patients have complications that lead to the development of severe acute respiratory infection and often fatal. In most cases, the cause of severe acute respiratory infection is the influenza virus. The special place of influenza in the SARS group is due to the ability of the virus to antigenic variability, which leads to a high susceptibility of the population. Influenza poses a serious threat to all mankind and is an infection without borders [6].

Therefore, ARVI therapy should be timely and begin from the moment the first signs of the disease appear. The principles of treatment take into account a number of requirements, such as the prevention of further development of the pathological process, the development of complications, their relief, prevention of chronization of the process. During the epidemic rise in morbidity, etiotropic drugs begin to play a leading role, which become the means of the first line of defense and have a direct and inhibitory effect on the reproduction of viruses. At the same time, data on the feasibility of using antibiotics for acute respiratory viral infections are ambiguous. It is known that antibiotics of synthetic origin against viruses are useless and are not recommended, antibacterial therapy for viral infection does not affect the duration of the

disease, the dynamics of the main clinical symptoms, the severity of postinfectious asthenic syndrome, the patient's health status [4].

One of the approaches to increasing adherence to treatment is a fixed combination of medications in one tablet. Usually, combined pharmacotherapy is associated with a formally increasing number of medications taken during the day, which often causes a negative reaction of patients in the form of a decrease in adherence to treatment, both due to forgetfulness and confusion in reception, and due to a negative attitude to the excessive, from their point of view, the number of drugs. In this regard, it is quite reasonable to use fixed combinations. An example of this is the combined drug Grippomix."

"Grippomix" is a combined drug in the form of a powder for the preparation of a solution for oral administration in sachets, intended for the etiotropic and symptomatic treatment of influenza, acute respiratory viral infections, feverish conditions due to viral respiratory tract damage in adults and children. A significant advantage of the drug is the presence of almost all the necessary active ingredients for the complex therapy of diseases in one form containing paracitamol, rimantadine, ascarbic acid, cetirizine in standard doses [2]. Paracetamol has analgesic, antipyretic and anti-inflammatory effects. It is the drug of choice in patients, in patients with bronchial asthma, peptic ulcer disease, hemophilia, children under 12 years of age, pregnant and lactating women [7]. Ascorbic acid participates in the regulation of redox processes, carbohydrate metabolism, capillary permeability, blood clotting, tissue regeneration, activates immune reactions, prevents the development of increased permeability and fragility of blood vessels that cause hemorrhagic processes in influenza and SARS [8]. Rimantadine hydrochloride has antiviral activity against influenza type A virus, reduces toxic manifestations caused by other types of influenza viruses and viruses that cause ARVI. [1]. Cetirizine dihydrochloride has a pronounced antihistamine effect, prevents the development of edema of the tissues of the upper respiratory tract associated with the release of histamine. Cetirizine is a selective H1 blocker of long-acting histamine receptors, is one of the safest drugs [3].

The aim of the study was to evaluate the efficacy and safety of the complex drug Grippomix containing paracetamol, rimantadine, cetirizine and vitamin C in the treatment of patients with uncomplicated ARVI and influenza.

Materials and methods: on the basis of the TMA polyclinic, we examined 40 patients aged 30 to 60 years, often suffering from colds. The study included patients with mild 36% and moderate SARS 64%. The clinical criteria were the presence in the anamnesis or during the therapy period of at least one episode of an increase in body temperature above 38 °C, the presence of catarrhal symptoms (cough, sore throat, runny nose/nasal congestion) and signs characterizing intoxication (headache, myalgia, chills and weakness). The patients were divided into 2 comparable groups of 20 people. The first group of patients was prescribed the complex drug grippomix 1 sachet 3 times a day for 3-5 days. Group 2 (control) received only symptomatic treatment (NSAIDs, antihistamines).

The study did not include young people (under 18 years of age), pregnant and lactating women, as well as patients who received anti-influenza or antitussive vaccination in the previous 12 months, had a chronic disease in the acute stage (kidney disease, diabetes mellitus, thrombophlebitis) or HIV infection, received systemic corticosteroids or other drugs that affect on the immune system, alcohol abusers or drug addicts.

For 5 days, the severity of the main symptoms of acute respiratory viral infections (fever, chills, cough, nasal congestion, sore throat, headache, weakness, lack of appetite, inactivity, inflammatory changes from the mucous membranes of the mouth and nasopharynx) was assessed using a 3-point scale. The values ranged from "0" (in the absence of symptoms) to "3" (with their maximum severity), and the total severity of their clinical components was also taken into account (the total score of the ten main symptoms max = 30 points).

Results and discussion: According to a study conducted among 40 patients with symptoms of uncomplicated ARVI and influenza, the high efficacy and safety of the use of the combined drug grippomix was confirmed. Intoxication and catarrhal syndrome regressed significantly faster and in a larger number of patients in the main group compared to the control group.

Against the background of therapy with grippomix in patients with acute respiratory viral infections, rapid relief of the course of the disease was noted in a greater number of cases. By the end of the first day from the start of therapy, the number of patients with a milder course of the disease in the main group was 41% higher than in the control group ($p<0.001$) and these differences persisted during the next day of therapy. In the first group of patients, an increase in body temperature was noted by 18 (90%) patients, in the second group of 19 (95%) patients. In the first group, a decrease in body temperature to normal values was observed on day 3 in 17 patients (94.4%). The average values of temperature decrease in the first group were 2.5±0.29 days. And in the control group 4.5 ± 0.35 days. In this group, a decrease in temperature for 3 days was observed only in 10 (52.6%) patients (Table 1). The febrile period was reduced to an average of 12-48 hours, a decrease in other symptoms of intoxication (weakness, adynamia, sweating) was observed on average by 2-3 days of taking the drug.

Table 1.

Dynamics of reduction of intoxication syndrome in patients with uncomplicated form of ARVI and influenza

Group of patients	number of patients, %	Treatment days				
		1st	2nd	3rd	4th	5th
The first group (grippomix)	n=18 (90%)	1 (5,5%)	5 (27,8%)	11 (61,2%)	1 (5,5%)	-
The second group (control)	n=19 (94,4%)	-	4 (21%)	6 (31,6%)	7 (36,8%)	2 (10,5%)

Catarrhal phenomena, rhinitis and cough were eliminated fairly quickly within 2-4 days in 70% of patients of the main group. As our study showed, in the first main group there was a faster resolution of all symptoms, which was especially noticeable in the first 3 days from the start of therapy, i.e. during drug therapy. The number of patients who had a decrease in headache, cough, nasal congestion and sore throat, exceeded the same indicator in the control group by 3.5, 3.1 and 1.5 times on the 2nd, 3rd and 5th days from the start of therapy, respectively. The dynamics of headache disappearance prevailed in the first group. On the 3rd day of treatment, headaches were not observed in 16 (80%) patients, and in the second group of 10 (50%) patients. After 5 days of treatment, headache was absent in all patients in the first group (100%), whereas in the placebo group in 15 patients (75%). In this group, headache

persisted in 4 (21.1%) patients on the 5th day. In general, the average duration of headache disappearance in the first group was 2.7±0.15, and in the second group — 4.5±0.22 days ($p<0.05$). A more pronounced decrease in cough symptoms was also observed in the first group. On the 3rd day of treatment, the absence of cough was noted by 13 (65%) patients. Whereas in the control group, on the 3rd day of treatment, the absence of cough was noted only in 7 (35%) patients. The average duration of cough disappearance in the first group was 3.3 ±0.14 days, and in the control group 4.8±0.16 days ($p<0.05$). In addition, there was a significant effect of fluomix therapy on the duration of the period of resolution of symptoms such as sore throat and nasal congestion.

Thus, when comparing the total score of ARVI symptoms, a significant decrease was observed in the group of patients taking the combined drug grippomix, compared with the control group. At the same time, the number of points with different symptoms of ARVI on the 5th day of treatment with antipyretic and antihistamine drugs was 13.5± 3.3 in the control group, whereas in the group of patients taking the combined drug was 4.1± 2.4 and this difference was statistically significant ($p<0.05$). Clinical improvement was accompanied by positive changes in the quality of life.

During the follow-up period, bacterial complications and exacerbations of chronic infections were not observed in any case in patients of the main group who received grippomix.

In the control group of patients with identical symptoms, the dynamics of convalescence lagged behind in terms of timing and severity, despite the use of symptomatic agents, in 13% of cases there was an exacerbation of chronic infections (chronic tonsillitis, chronic obstructive pulmonary disease), which required the appointment of antibacterial therapy. In both groups, there were no allergic reactions and side effects requiring withdrawal of the drug.

Thus, the analysis of the dynamics of intoxication and catarrhal syndromes in the main group showed a tendency to more rapid elimination of the main symptoms. Our studies have shown that against the background of treatment with fluomix in the main group, exacerbations of chronic pathology were noted significantly less often than in the control group, as well as a shortening of the terms of the symptoms of the disease.

Conclusions: combined medications can effectively stop intoxication and catarrhal syndromes, significantly improve the quality of life. In this regard, the use of grippomix is quite justified, since taking this drug significantly facilitates the manifestations of the disease and increases adherence to therapy, which leads to a reduction in the risk of serious complications and a faster recovery.

References:

1. Dektyareva U.A., Ovsyannikov D.Yu., Zhdanova O.I. Clinical efficacy of a new form of rimantadine in children of "risk groups" of severe influenza and acute respiratory diseases. Attending physician 3. 2010. pp.37-45.
2. Grippomix: preclinical study of the toxicological safety of the drug / Dubovik B.V., Nerovnya A.M., Nasek V.M., I.A. Zhukova, L.I. Pokachailo L.I. 02.2010.
3. Kryukova A.I.Kunelskaya N.L., GurovA.V.,Izotova G.N. Cetirizine in the treatment of inflammatory diseases of the nasal cavity Median Council No. 18,2016 pp.110-113.

4. Lazareva N.B., Zhuravleva M.V., Panteleeva A.R. ARVI. Rational pharmacotherapy. Medical advice. 2016. pp. 68-74.
5. Prokhorovich E.A. / Acute respiratory viral diseases. Zemsky doctor. No.1. 2010. pp.39-43.
6. Nikiforov V. V., Suranova T. G., Orlova N. V., Cardonova E. V.,. Smetanina S. V. Algorithms for providing medical care to patients with acute respiratory viral infections. DOI: 10.33667/2078-5631-2019-2-27(402)- 6-13 Medical Alphabet N 27 / 2019, volume No. 2 Modern Polyclinic. pp.6-13.
7. Picon P.D., Costa M.B., da Veiga Picon R., Fendt L.C., Suksteris M.L., Saccilotto I.C. et al. Symptomatic treatment of the common cold with a fixed-dose combination of paracetamol, chlorphenamine and phenylephrine: a randomized, placebo-controlled trial. BMC Infect Dis. 2013;13:556.
8. Vorilhon P, Arpajou B, Roussel HV, Merlin E, Pereira B, Cabaillot A. et al. Efficacy of vitamin C for the prevention and treatment of upper respiratory tract infection. A meta-analysis in children. Eur J Clin linical Pharmacology. 2019;75:303–311.