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MONITORING THE EFFECTIVENESS AND SAFETY OF A COMBINED DRUG CONTAINING REMANTADINE FOR THE TREATMENT OF ACUTE RESPIRATORY VIRAL INFECTIONS

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ABSTRACT

Acute respiratory diseases are the most common among all diseases. Given the variety of symptoms of acute respiratory viral infections, various groups of drugs are used to treat them, however, combined drugs are popular among the population and clinic doctors. This is "Grippomix" - a combined drug containing paracytamol, rimantadine, cetirizine, ascarbic acid, the effectiveness and safety of which was studied in this study. The presence of almost all the necessary active ingredients in a single form used for the complex treatment of acute respiratory viral infections contributed to an increase in patients' compliance with treatment, facilitating the clinical course of the disease, reducing the risk of complications. This helps to reduce the need for antibiotic therapy.

Introduction: Despite obvious scientific achievements and anti-epidemic measures, doctors, epidemiologists and health care organizers have to state that acute respiratory viral infections (ARVI) and influenza remain still poorly controlled infections. This is due to the polyetiologic nature of pathogens, the lack of vaccines (with the exception of influenza) for specific prevention, the mass nature of diseases, the mixed nature of infections, the variability of the antigenic properties of viruses and the developing resistance to drugs [1].

Acute respiratory diseases are the most common among all diseases. Adults get sick with them 2-4 times a year, children - even more often. It can be stated that although 90–95% of upper respiratory tract infections are caused by viruses and only 5% by bacteria, in 75% of cases antibiotics are prescribed to patients [2]. At the same time, the data on the appropriateness of using antibiotics for ARVI are ambiguous. It is known that antibiotics of synthetic origin against viruses are useless and are not recommended, antibiotic therapy for viral infection does not affect the duration of the disease, the dynamics of the main clinical symptoms, the severity of post-infectious asthenic syndrome, the patient's state of health. [3].

Standard treatment of ARVI and influenza is mainly symptomatic. Given the variety of symptoms of ARVI, various groups of drugs are used for their treatment, but combined drugs are popular among the population and doctors of polyclinics, which is undoubtedly convenient for patients. To date, the market has a large selection of complex combination drugs containing various active ingredients for the treatment of this infection. Drugs for symptomatic treatment do not affect the virus itself and do not affect the immune system, they eliminate the symptoms of colds and flu; facilitate breathing, removing swelling from the mucous membrane of the nose; bring down the temperature and reduce the activity of inflammation - this is how all antipyretic drugs work, for example, paracetamol, aspirin, ibuprofen and others. Also, these funds block the cough center, reducing dry cough (for example, butamirate), and if the inflammation has gone far, they dilute sputum and improve its excretion (glycyrrhizinic acid, bromhexine, acetylcysteine); supply the body with vitamins and minerals necessary for the immune system (vitamin-mineral complexes). One way or another, they help support the body in the fight against the disease. Symptomatic therapy accelerates recovery, but does not reduce the likelihood of complications, so the issue of etiotropic treatment is relevant - antiviral therapy. Antiviral drugs are compounds of natural and / or synthetic origin that have an etiotropic effect and are used to treat and / or prevent viral infections.

Taking into account the above, currently the drug "Grippomix" has appeared on the pharmaceutical market of Uzbekistan - a combined drug in powder form for the preparation of a solution for oral administration in sachets, intended for the etiotropic and symptomatic treatment of influenza, ARVI, febrile conditions due to viral damage to the respiratory tract in adults and children. A significant advantage of the drug is the availability of almost all the necessary active ingredients for complex therapy of diseases in one form containing paracytamol, rimantadine, ascarbic acid, cetirizine in standard doses.

Paracetamol has an analgesic, antipyretic and anti-inflammatory effect. Paracetamol is the most commonly recommended drug in children and adults with ARVI. It is the drug of choice in patients, in patients with bronchial asthma, peptic ulcer disease, hemophilia, children under the age of 12 years, pregnant and lactating women[5,6].

Ascorbic acid is involved 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 ARVI.

Rimantadine hydrochloride has antiviral activity against influenza virus type A, reduces toxic manifestations caused by influenza viruses of other types and viruses that cause ARVI. It has pronounced interferonogenic properties, increasing the total content of interferons, enhances the protective properties of the drug against a viral infection that damages the respiratory tract [5]. Rimantadine - affects influenza viruses, reducing their contagiousness, hemagglutination, neuroamineidase activity of viruses, increases the production of alpha and gamma interferons. It has been shown that in influenza caused by

virus B, rimantadine also has an antitoxic effect. By blocking the M2 channels of the influenza A virus, it disrupts the ability of the influenza virus to enter cells and release ribonucleoprotein. But the pharmacological properties of rimantadine are broader and are not limited exclusively to direct antiviral action. The drug induces the production of interferons alpha and gamma and has an antitoxic effect. Rimantadine is distinguished not only by efficiency, but also by safety and good tolerability. The pharmacological efficacy of the drug is ensured by inhibiting the reproduction of the virus in the initial stage of the infectious process. In the United States, rimantadine is approved for use in children from 3 years of age (Prevention and Control of Influenza: recommendations of the Committee on Immunization Practices - ACIP, 1999), which confirms its low toxicity, since the FDA requirements for the safety of drugs used especially in children are very high. [6].

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 - - a selective blocker of H1 histamine receptors of long-acting (up to 24 hours), is one of the safest H1GB and in this regard is widely used, dispensed without a prescription in Russia, the USA, Europe and other countries, inhibits the degranulation of mast cells in the release of histamine leukotrienes, which in ARVI provoke congestion and swelling of the nasal passages, bronchospasm, dry nasal cough. The decongestant effect of the drug develops quickly after 1-3 hours, reaches a maximum after 8-12 hours and lasts up to a day. Unlike some other H1GB, it does not cross the blood-brain barrier and has little bronchodilator activity.[7]

Vitamin C capillaroprotector is also selectively concentrated in the cells of the immune system, including lymphocytes and macrophages. The accumulation of vitamin C in lymphocytes increases their survival in viral infection and contributed to the growth of the lymphocyte population. [8].

The aim of the work was: to evaluate the efficacy and safety of the complex drug Grippamix containing paracetamol, rimantadine, cetirizine and vitamin C in the treatment of patients with initial manifestations of respiratory viral infection and influenza.

Materials and methods. On the basis of the TMA polyclinic, we examined 30 patients aged 30 to 60 years, often suffering from colds, including 5 patients with COPD in the anamnesis. The total number of intercurrent diseases with exacerbation of chronic foci of ENT pathology was 6 patients (chronic tonsillitis in 4, chronic sinusitis in 2, COPD). The studies include patients with mild 28% and moderate severity of ARVI 72% (when assessing the severity of the course, the accepted criteria for the severity of ARVI were used, namely: the severity of the syndrome of intoxication and respiratory tract damage syndrome), who applied on the 1-3 day of the disease, of which 50% on the first day of the disease due to alertness in terms of coronavirus infection, with catarrhal phenomena, intoxication and febrile temperature rises and the absence of antibacterial, antiviral and immunomodulatory therapy before hospitalization in the anamnesis. Patients were randomly divided into 2 comparable groups of 15 people. The first group of

patients was prescribed a complex drug grippomix 1 sachet 3 times a day for 3-5 days. Group 2 (control) received only symptomatic treatment (NSAIDs, antihistamines).

Intoxication and catarrhal syndromes regressed significantly faster and in a larger number of patients of the main group compared to the control group. 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. Catarrhal phenomena, rhinitis and cough were quickly eliminated within 2-4 days in 65% of patients of the main group.

During the observation period in patients of the main group who received grippomix, in none of the cases were noted the occurrence of bacterial complications and exacerbations of chronic infections.

In the control group of patients with identical symptoms, the dynamics of convalescence lagged behind in timing and severity, despite the use of symptomatic agents, in 5% of observations an exacerbation of chronic infections (chronic tonsillitis, COPD, pyelonephritis) was noted, which required the appointment of antibiotic therapy.

The severity of catarrhal and intoxication syndromes was estimated in conditional points from "0" (in the absence of symptoms) to "5" (with their maximum severity) according to the total severity of their clinical components (fever, lethargy, weakness, lack of appetite, hypodynamia, inflammatory changes in the mucous membranes of the oropharynx, cough syndrome, nasal congestion, etc.).

Analysis of the dynamics of intoxication and catarrhal syndromes in the main group showed a tendency to more rapid elimination of symptoms.

In both groups, there were no allergic reactions and side effects requiring discontinuation of the drug.

Thus, our studies have shown that against the background of treatment with influenzamics in the main group, exacerbations of chronic pathology were significantly less common than in the control group, as well as a shortening of the period of intoxication-catarrhal syndrome, its reception was not accompanied by allergic reactions and side effects.

Conclusions: the complex drug grippomix can be used for the prevention and treatment of influenza and ARVI. The use of fixed drugs containing rimantadine increases patient compliance with treatment, thereby facilitating the clinical course of the disease, reduces the risk of complications, and promotes faster recovery. Reduces the need for antibiotic therapy.

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