MODERN MEANS OF PREVENTION AND TREATMENT OF ACUTE RESPIRATORY VIRAL INFECTIONS IN CHILDREN

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Annotation: There is a sufficient arsenal of antiviral agents that can influence the development of the infectious process. These drugs are different both in terms of application points in the process of virus replication, and in terms of mechanisms of action, and in terms of the "activation" of their activity. All this makes it possible to use them both for therapeutic and preventive purposes.

Keywords: carcinogenic effect, infectious diseases, prevention and therapy

Аннотация: Имеется достаточный арсенал противовирусных средств, способных влиять на развитие инфекционного процесса. Эти препараты различны как по точкам приложения в процессе репликации вируса, так и по механизмам действия, и по степени «активации» их активности. Все это дает возможность использовать их как в лечебных, так и в профилактических целях.

Ключевые слова: канцерогенное действие, инфекционные заболевания, профилактика и терапия.

1. PVP can be used for the purpose of routine prevention of influenza and other acute respiratory infections. Planned prevention is indicated:

— Patients belonging to risk groups vaccinated at the beginning of the epidemic. PVP is prescribed for 6 weeks — for children less than 9 years old and for 2 weeks — for children over 9 years old;

— Patients with immunodeficiency conditions;

— unvaccinated population;

— vaccinated patients, but constituting a high-risk group for the incidence of SARS.

Microbes (bacteria, rickettsias, mycoplasmas, chlamydia), bacterial lysates, natural polyphenols and other synthetic chemical compounds have a similar ability, while many of them are highly toxic, have a high mutagenic and carcinogenic effect, can cause severe allergic reactions, which inhibits their use in medicine.

As a result, the processes of dissociation of M1 protein (the main matrix protein), the release of the nucleocapsid and, consequently, its transcriptional activity are disrupted. The drug does not affect viruses inside the cell, and therefore it is advisable to use it as an emergency prophylaxis. For therapeutic purposes, it is effective only with early appointment. Elimination of the drug occurs by renal excretion and hepatic biotransformation. Therefore, in most patients with impaired kidney and liver function, repeated administration of remantadine can lead to accumulation and development of adverse reactions. In addition to the above, the drug potentiates the effects of endogenous dopamine, mainly in the central nervous system, causing irritability and insomnia in patients.

Zanamivir is a strong and highly effective neuraminidase inhibitor. The use of the drug through a discaler in the shortest possible time from the onset of the disease facilitates the symptoms and shortens the duration of the infectious process, prevents the development of complications. It demonstrates high preventive and curative efficacy in children over 5 years of age (the effectiveness reaches 79% compared to placebo). It is contraindicated for pregnant and lactating women, children under 5 years of age.

Frequent use of allopathic drugs leads not only to the development of adverse reactions, usually allergic, since the vast majority of medicines for children are available in syrups, but also to the formation of immunological tolerance. The high efficiency of homeopathy, comparable to traditional allopathic medicine, is also proved by the fact that many homeopathic remedies are registered as medicines. The safety and proven efficacy of this drug group make it especially preferable in young children and with severe comorbid conditions.

The ability to induce type I interferons, which have an antiviral effect, have antibacterial, anti-inflammatory and immunomodulatory potentials, the rapid

achievement of the necessary concentrations of INF at small doses of the inducer determines the demand for cycloferon in the clinic of infectious diseases. Its effectiveness in the treatment of patients with viral and bacterial infections has been proven in numerous studies.

The reason for the use of cycloferon in the treatment of acute respiratory viral infections (ARVI) is the development of interferon deficiency against their background and a wide range of biological activity of this drug (immunomodulatory, anti-inflammatory, antiviral). Cycloferon promotes rapid induction (2 hours after ingestion) of interferon, which is detected in lung tissues after 4-6 hours. In addition, the drug has an affinity for the receptors of alveolar macrophages, which is accompanied by intensive production of interferon in the lungs, followed by activation of natural, as well as correction of adaptive immunity and determines its effectiveness against respiratory diseases and influenza.

Prescribing the drug for the treatment of acute respiratory viral infections and influenza reduces the risk of complications. Thus, complications in the form of pneumonia were noted only in 2.2% of cases in patients receiving cycloferon, while in patients receiving symptomatic therapy, complications in the form of pneumonia, bronchitis, angina, sinusitis were recorded in 21.4% of cases.

The study of the effect of cycloferon on the reproduction of herpes simplex virus type I (HSV-I) in Vero cell culture showed that this drug delays the replication cycle of herpes virus at the stage of formation of DNA-containing capsids in cell nuclei [51], which was the basis for a comprehensive study of its clinical efficacy. Conducted studies in sick children and adults with various forms of herpetic disease (Epstein-Barr and cyto-megalovirus infections, recurrent genital herpes and herpetic lesions of the skin and mucous membranes, infection caused by HSV-I and/or HSV-2 in combination with HIV infection, genital papillomavirus infection and etc.) demonstrated the advantages of schemes with the inclusion of cycloferon in terms of relieving the manifestations of the acute process, the rate of onset of remission and the frequency of relapses, the duration of the inter-relapse period..

Comparative experimental studies of the IEI of cycloferon, amixin, ridostin in Venezuelan encephalitis, Rift Valley fever and predatory smallpox have demonstrated the presence of the greatest effectiveness of cycloferon, its more pronounced protective properties compared to amixin and ridostin, which allows us to consider this drug as a priority means of prevention and therapy of particularly dangerous viral infections, and outside depending on the state of the immune system.

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