

EFFICACY OF IMMUNOFLAZID IN PREVENTION OF ACUTE VIRAL INFECTIONS IN CHILDREN OF PRESCHOOL AGE

E.I. Yulish, Y.L. Soroka, M.L. Istrati, S.Ya. Yaroshenko
M.Gorky Donetsk National Medical University

Summary. *The article presents the results of a clinical trial of the preventive efficacy of the domestic medicinal drug Immunoflazid in ARVI in preschool children attending children's groups.*

Key words: *children, ARVI, prevention, Immunoflazid.*

Introduction

Acute respiratory viral infection affecting topographically different parts of the respiratory system is the most common and most often recurring disease in a child population. Several parts of the respiratory tract, especially the upper and middle ones, are often involved in the pathological process. The diseases usually occur in the form of rhinitis, nasopharyngitis, laryngotracheitis, tracheitis, bronchitis [2,9,7]. Especially often, acute respiratory viral infections (ARVI) are transmitted by children attending children's groups.

In addition to the risk of complications associated with ARVI, recurrent diseases adversely affect the health of children, lead to problems in morphological and functional conditions in the body, contribute to the formation of chronic foci of infection, allergization and, as a result, retardation of mental and physical development. It is also necessary to take into account the considerable material costs of medicines, medical leave for childcare, being absent from school, etc.

Up to 5 million cases of ARVI and influenza are registered annually in Ukraine, the highest incidence rates are in children under 5 years. In Russia, 75 thousand complaints about ARVI [5, 6, 10] accrue to 100 thousand children. Especially high incidence of acute respiratory viral infection is observed in children's preschool groups and in families with many children.

The most common infectious agents of respiratory infection among children are respiratory syncytial viruses, adenoviruses, influenza viruses and parainfluenza. In addition to the immediate causes of acute respiratory viral infection, a number of factors that contribute to the development of infection should be noted, among which unfavorable ante- and postnatal development of the child, the state of the central nervous and immune systems should be accentuated.

At present, it is known that interferon plays a dominant role in the regulation of immunity, its activity is suppressed under the influence of various causes: chronic diseases, irrational nutrition, intoxications of various origins, improper intake of antipyretic agents (primarily, use at the slightest rise in body temperature, which contributes to inhibition of endogenous interferon response). In sickly children, the activity of the interferon system is already reduced [1, 5, 9].

For the prevention of respiratory infections, in addition to specific methods (vaccination), there are many nonspecific ones, among which inducers of endogenous interferon [3,4,8] find widespread application in recent years. One of these medicinal drugs is Immunoflazid. The drug has immunomodulating and antiviral properties. It stimulates the synthesis of endogenous interferon of types I and II, has an inhibitory effect on influenza and herpes viruses, increases resistance of the organism to viral infections, stimulates humoral and cellular immune responses. Immunoflazid has anti-oxidant properties, preventing the accumulation of products of peroxide oxidation of lipids and inhibiting the free radical processes. In pediatric practice, the drug is used in children of all age groups, both for therapeutic purposes and for the prevention of viral diseases of the respiratory tract.

The purpose of this work is a clinical study of the preventive efficacy of Immunoflazid in children of the first years of life attending children's groups.

Material and methods of the trial

A trial on preventive efficacy of Immunoflazid in ARVI was carried out in 220 children aged 1 to 6 years attending an organized children's group, located in the service sector of the children clinical hospital No.2 in Donetsk. Children under observation were divided into two groups of 110 people each. Children with

known severe allergic reactions in the anamnesis were not included in the trial. Children of the main group underwent preventive therapy with acute respiratory viral infection using Immunoflazid for 14 days.

Children of the control group were given no Immunoflazid. The dosage of the drug depending on the age was: children under 2 years of 1 ml 2 times a day; from 1 to 4 years - 1.5 ml 2 times a day for the first 3 days, then - 3 ml 2 times a day; from 4 to 6 years - the first 3 days 3 ml 2 times a day, then - 4 ml 2 times a day. Children of both groups were not administered any other drugs. The trial was carried out in the period of increased incidence of ARVI (February).

The results of the trial and their discussion

As a result of the trial, it was found that the incidence of ARVI in the main group was reduced by 2.2 times ($p < 0.05$) after the preventive therapy, and the advanced disease proceeded without complications. The reliability of the differences was determined using the method of alternative variation.

Prior to the preventive therapy, the incidence of acute respiratory viral infection in both groups was almost the same, with no significant differences in the incidence of respiratory infections in the groups (Table 1).

It should be noted that the number of absence from school due to ARVI per child in the main group decreased by 35%; i.e. almost by 2 days (Table 2).

Table 1

Incidence of ARVI in children before and after preventive treatment using Immunoflazid

Group	Total number of children	Number of children who had ARVI during 6 months before preventive treatment using Immunoflazid		p	Number of children who had ARVI during 36 months after preventive treatment using Immunoflazid		p
		abs.	%		abs.	%	
Main	110	36	32	>0.5	14	12	<0.05
Control	110	34	31	>0.5	36	33	<0.05

Absence from school due to ARVI before and after preventive treatment using Immunoflazid

Absence from school	Before preventive treatment	After preventive treatment
Absence from school in total	930	696
Number of absence from school per child	4.8	3.1

Immunoflazid tolerance in children was good, no negative emotions and allergic reactions were reported. The drug in syrup form, without dyes and flavor additives, is convenient for use in children of any age.

Conclusions

Taking into account the positive clinical effect in the prevention of acute respiratory viral infection and the absence of side effects, it is possible to recommend Immunoflazid for use in healthy and sickly children for the purpose of nonspecific prevention of acute respiratory viral infection in the period of increased seasonal incidence of acute viral infections.

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