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Enterovirus Infection at Children

ABSTRACT

The analysis of clinical course of enterovirus infection at children has been carried out. On the base of the Children's city clinical hospital №2 all children underwent the clinical research minimum: complete blood count and clinical urine analysis, throat and nasal swab, including stool sample taken on enterovirus infection. Clinically the enterovirus infection has been detected as herpetic angina with diarrhea and fever. Antiviral drug intake in combination with Cefotaxime (100 mg/kg/day) has manifested good clinical effect.

Keywords: enterovirus infection, herpetic angina, viruses, analyses, enterovirus

INTRODUCTION

Enterovirus infection is a group of diseases, the cause of which lies several types of viruses. Cause disease Coxsackie virus, the polioviruses and ECHO (ECHO). These viruses have the structure of the capsule and the nucleus, containing RNA (a type of DNA). The structure of the capsule may be very different, as are the so-called serotypes (types). The excreting polioviruses 3 serological type. Viruses Coxsackie group are divided into Coxsackie A, the Coxsackie virus and allocate 24 serological varieties, Coxsackie B - 6. Viruses echo allocate 34 serological type. Infection occurs in several ways. Viruses in the environment can get from a sick child or from a child who is infected person [1,2,3].

The transfer mechanism may be airborne (when sneezing and coughing with droplets of saliva from a sick child to a healthy and fecal-oral not complied with the rules of personal hygiene. Most often, the infection occurs through the water, when drinking raw (not boiled) water. The disease begins abruptly with increase of body temperature to 38-39 C. The temperature often may be 3-5 days, then decreased to normal values. Very often the temperature of the undulating current: 2-3 days and temperature, then decreases and 2-3 days is normal digits, then rises again for 1-2 days and will normalize again finally.With the defeat of the mucosa of the oropharynx is the development of enterovirus angina. It is manifested by fever, General intoxication (weakness, headache, drowsiness) and the presence of vesicular rashes in the form of bubbles filled with liquid, the mucosa of the oropharynx and tonsils. The these bubbles burst, and from the formed blisters, filled with white bloom. After recovery at the place of the sores do not leave any traces.

The Aim of the Study: to study the clinical features and course of enteroviral illness in children of early age.

MATERIALS AND METHODS

We examined 50 children at the Children's city clinical hospital №2, Yakutsk with a clinical diagnosis of Herpetic angina. Enteroviral infection. at all children underwent clinical research minimum: General analysis of blood and urine, swab from the nose and throat. All children taken fecal enterovirus infection and identified enterovirus. Virological methods research is aimed at the selection of clinical material (blood, faeces, cerebrospinal fluid) enterovirus infection in cultures of sensitive cells.

RESULTS

In 90% of the surveyed children revealed the presence of herpetic angina. 25% of children showed loose stool up to 5-6 times a day without pathological impurities. 15% of children showed the presence of a petechial rash.

In 90% of children the disease is accompanied by high fever up to 40 degrees. All of the surveyed children were treated before admission to hospital outpatient, received drugs Amoxiclav (21 child), Augmentin (15 children) and Sumamed (14 children). None of the children are not noted positive dynamics of the flow enterovirus infection as a result of outpatient treatment. The highest figures temperature (40 ° C) was observed during the eruption of herpetic elements of the soft palate and the manifestations of herpetic angina.

Changes in the General analysis of blood showed the following picture: leukocytosis exceeding 15 10 60% of children with herpetic angina, other changes in the analysis of peripheral blood is not marked. Currently as antiviral agents mostly used drugs alpha-interferon (Alfa-2A, Alfa-2B), both natural and recombinant. Apply interferons topically and parenterally. All children received preparations of interferons.

All children received cefotaxim in age the dose of 100mg/kg/day, treatment pharynx was performed with a solution of Miramistin, children over two years chlorhexidine 0.2 percent. All examined children 100% had received inpatient treatment for 5 to 7 days.

Conclusions:

1. Enteroviral infection occurs with a high fever, loose stool and herpetic angina.
2. Treatment with oral medications amoxicillin and Sumamed inefficient.
3. The use of antiviral drugs in combination with Cefotaxime (100 mg/kg/day) showed a high effectiveness of treatment.

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