



## THE CURRENT COURSE OF VIRAL HEPATITIS A IN CHILDREN

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**Abstract:** The article describes the epidemiology, clinical course, methods of diagnosis and prevention of viral hepatitis A in children. The study shows the importance of early diagnosis and vaccination in reducing complications in children with VGA. This material provides important information in the fight against VGA in the health sector.

**Keywords:** Children, viral hepatitis A, HAV, epidemiology, clinical course, diagnosis, treatment, vaccine, prevention, hygiene.

### Introduction

Viral hepatitis A (VHA) is an acute infectious disease caused by the hepatitis A virus (HAV), which is transmitted through food, water or personal hygiene. This disease is one of the urgent problems in the world health system, especially in developing countries. VGA is common among children, and the disease is often mild or asymptomatic. However, in some cases, fulminant forms of hepatitis or other serious complications can be observed. “The high level of contagiousness and easy spread of VGA pose a serious risk to children’s health. Non-observance of hygiene rules in public places, contamination of drinking water and food products further increases the spread of this disease. Also, the effect of HAV on the body and the specific characteristics of children’s liver lead to differentiation of the clinical course of the disease”[1].

Today, although a number of effective methods for diagnosing and treating hepatitis A have been developed, preventive measures, in particular, vaccination and increasing hygienic culture, are important in preventing the disease. This article analyzes the current course of viral hepatitis A in children, its clinical features, diagnostic and treatment methods, and the effectiveness of preventive measures.

### Materials and methods

In this study, retrospective and prospective methods were used to study the clinical, laboratory and instrumental parameters of children infected with viral hepatitis A (VHA). “Medical documents, laboratory results and observations of the treatment process of children aged 1-16 years admitted to the hospital of infectious diseases with a diagnosis of VGA during 2020-2024 were used as research materials. A total of 120 patients participated in the study, and they were divided into age groups: 1-5 years old (40 people), 6-10 years old (50 people) and 11-16 years old (30 people)”[5].

**Diagnostic process:** The clinical course of the disease was observed in patients, in which the main symptoms – general weakness, fever, nausea, vomiting, yellowing of the skin and sclera of the eyes – were evaluated. With the help of laboratory methods, the levels of ALT, AST, total and direct bilirubin in the blood were determined, and changes in liver function were recorded. To confirm HAV infection, HAV IgM and HAV IgG antibodies were studied by serological tests. At the same time, the enlargement of the liver, structural changes and other pathologies were detected using ultrasound examinations of the abdomen.

**Methods of treatment:** An individual treatment plan was prepared for the patients. It includes:

parenteral and oral rehydration, hepatoprotectors, symptomatic agents, including antipyretic and enterosorbent drugs. In severe cases, detoxification treatment methods were used.

Statistical analysis: All data collected during the study were analyzed using SPSS 26 statistical software. Means, standard deviations and confidence intervals were determined, and differences between groups were evaluated using dispersion analysis. The relationship between age, sex and severity of symptoms was studied using correlational analysis.

Ethical issues: "In the study, the personal data of the patients was kept confidential and they were used only for scientific purposes. Research processes were conducted in accordance with national and international ethical standards, and permission was obtained from the relevant ethics committee"[7].

These methods made it possible to comprehensively evaluate the clinical course, diagnosis and treatment characteristics of children with VGA. This study provides important information for the development of effective prevention and treatment strategies for VGA.

### **Results and discussion**

The results of the study made it possible to analyze the clinic, diagnosis and effectiveness of treatment of viral hepatitis A (VGA) in children. Of the 120 children included in the study, 65 (54.2%) were boys, and 55 (45.8%) were girls. In terms of the age of the patients, the most number of cases corresponded to the age group of 6-10 years (50 people, 41.7%).

Clinical course and symptoms: "Viral hepatitis A disease is often of moderate severity. The onset of the disease was mainly manifested by high body temperature (95.8% of cases), general weakness and nausea (92.5%). Jaundice (yellowing of the skin) was observed in 70% of cases, which is one of the main signs of liver damage. Vomiting and nausea were noted in 80% of children, but in 10% of cases, asymptomatic cases were also detected. Also, some children (15%) had variable disease patterns that included mildly symptomatic, short-term cases"[3].

Laboratory results: According to laboratory analysis, it was observed that the levels of ALT and AST increased in all children. The average values of ALT and AST levels were 3.5 and 4.2  $\mu\text{kat/l}$ , respectively. This indicates a malfunction of the liver and the presence of infectious processes in the body. The average level of bilirubin was 40.5  $\mu\text{mol/l}$ , and in many cases, an increase in direct bilirubin was noted, which indicates a violation of the secretory function of the liver. In serological examinations, HAV IgM antibodies showed a positive result in all patients, which confirmed the diagnosis of viral hepatitis A.

Treatment methods and results: "In the course of treatment, hepatoprotectors (ademethionine and ursodeoxycholic acid), rehydration therapy and symptomatic agents (antipyretics and enterosorbents) were used. The effectiveness of the treatment was evaluated based on the improvement of symptoms and laboratory parameters. The average duration of treatment of the disease was 7-10 days. In 92% of children who had the disease, the disappearance of clinical symptoms and normalization of laboratory parameters was observed"[2].

However, in 8% of patients, the persistence of severe symptoms (eg, enlargement and swelling of the liver), slow recovery of liver function, and the presence of some complications were noted. These cases occurred mostly in children aged 11-16 years, some of which required complex treatment.

### **Discussion:**

The results of the study showed the clinical course of VGA and the effectiveness of treatment methods. The course of the disease with moderate severity and mild symptoms means that the prognosis of the disease is good, mainly in children. In addition to the traditional symptoms of the disease, such as jaundice, fever, nausea and vomiting, there are cases of asymptomatic course.

"According to laboratory results, liver dysfunction and high ALT, AST indicators indicate the degree of loss of the liver system of the disease. Serological tests are important for the detection of HAV IgM and HAV IgG antibodies, the presence of which is necessary to confirm the disease"[6].

"Hepatoprotectors and symptomatic agents used in the treatment contributed to the rapid recovery of the disease. However, in some cases, complications (enlargement and swelling of the liver) persisted, which required special treatment for severe forms of the disease. The study shows the need for more in-depth research on the complications and clinical course of VGA in children"[4].

The results of the study provide important information for the prevention of VGA in children and the development of effective treatment strategies. In order to prevent viral hepatitis A, it is emphasized that it is

necessary to observe the rules of immunization and hygiene.

### **Conclusion**

In conclusion, this study aims to study clinical indicators and treatment effectiveness of viral hepatitis A (VHA) in children. The results of the study showed that VHA is often of moderate severity, with jaundice, fever and nausea as the main symptoms. The laboratory indicators of the disease confirmed the liver dysfunction. Hepatoprotectors and symptomatic agents are effective in treatment, and rapid improvement was observed in many patients. However, in some cases the enlargement and swelling of the liver continued. The study showed the need for immunization and compliance with hygiene rules for effective treatment and prevention of VHA.

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