



## CLINIC AND COURSE OF ACUTE OTITIS MEDIA IN CHILDREN AGAINST THE BACKGROUND OF CHRONIC HEPATITIS B

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**Аннотация.** Ушбу изланиш мақсади сурункали вирусли гепатит В билан зарарланган болаларда ўткир ўрта отитнинг клиникаси ва кечишини ўрганишдан иборат. Кўриниб турибдики, сурункали вирусли гепатит В фонида ўткир ўрта отит 14 ёшгача булган 60 та болаларда кузатилаяпти. Шулардан 32 таси ўғил болаларни, 28 таси қиз болаларни ташкил этаяпти. Кузатувлар натижаси шунки кўрсатдики, сурункали вирусли гепатит В билан касалланган болаларда ўткир ўрта отитнинг қуйидаги клиник симптомлари юқори фоизларда кузатилди: кулоқда оғриқ, кулоқдан йиринг оқиши, тана ҳароратининг кўтарилиши, токсикоз ва эксикоз ҳолатлари. Бизнинг назаримизда сурункали вирусли гепатит В фонида ривожланган ўткир ўрта отитнинг клиник кўриниши, биринчи навбатда сурункали гепатит-вирусининг гепатоцитлар ва иммун хужайраларининг зарарлаш биологик хусусияти, ҳамда бола организмнинг анатомио-физиологик хусусиятига боғлиқ. Хулоса қилиб шунки айтиш керакки, сурункали вирусли гепатит В фонида ривожланган ўткир ўрта отитнинг клиникаси ва кечиши, сурункали вирусли гепатит В билан зарарланмаган болаларда бир хилда кечади. Шу сабабли, шифокорлар ўткир ўрта отитни антибактериал даволашда иммунокомпонентли болаларни даволашдагидек тавсия беришлар лозим.

**Калит сўзлар:** ўткир ўрта отит, сурункали вирусли гепатит В, болалар, антибактериал терапия.

**Аннотация.** Целью данного исследования является изучение особенности клиника и течения острого среднего отита у детей на фоне хроническом гепатите В. Показано, что при хроническом гепатите дети до 14 лет с острым средним отитом составляет 60 больных. Из них мальчики составляют 32 больных, а девочки 28. В результате анализа полученных нами данных установлено, что наиболее частыми признаками острого среднего отита у детей являются: боли в ушах, гноетечение, повышение температура тела, токсикоз, эксикоз. Своеобразие клинического проявления острого среднего отита у детей,





на наш взгляд, в первую очередь связано как с биологическими свойствами вируса (поражение иммунокомпонентных клеток), так и с анатомо-физиологическими особенностями детского организма. Резюмируя, следует отметить что клиника и течение острого среднего отита у детей на фоне ХГВ схоже, что и у неинфицированных детей, то есть при выборе антибактериальной терапии врачи должны следовать тем же рекомендациями, что и при лечении ОСО у иммунокомпонентных детей.

**Ключевые слова:** острый средний отит, хронический гепатит В дети, антибактериальная терапия.

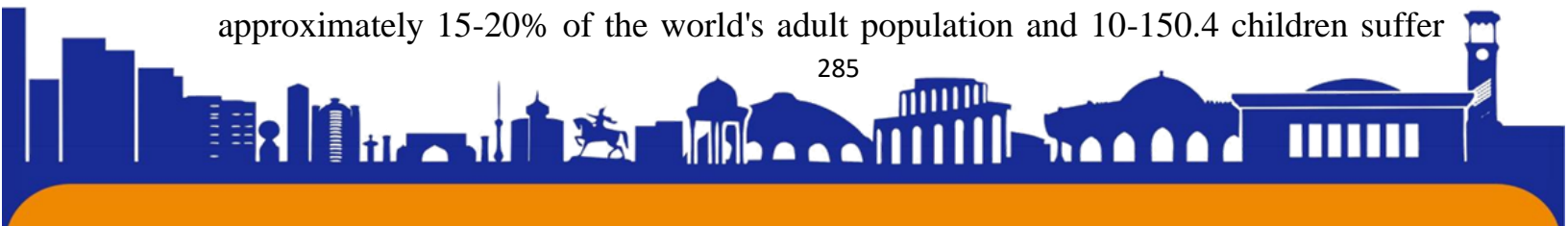
**Abstract.** The purpose of this study is to study the features of the clinic and the course of acute otitis media in children with chronic hepatitis B. It is shown that with chronic hepatitis, children under 14 years old with acute otitis media is 60 patients. Of these, 32 patients are boys, and 28 girls. As a result of the analysis of our data, it was found that the most common signs of acute otitis media in children are: ear pain, suppuration, fever, toxicosis, exsiccosis. The peculiarity of the clinical manifestation of acute otitis media in children, in our opinion, is primarily associated with both the biological properties of the virus (damage to immunocomponent cells) and the anatomical and physiological characteristics of the child's body. Summarizing, it should be noted that the clinic and the course of acute otitis media in children with CHB are similar to those in uninfected children, that is, when choosing antibiotic therapy, doctors should follow the same recommendations as in the treatment of acute otitis media in immunocomponent children.

**Key words:** acute otitis media, chronic hepatitis B, children, antibiotic therapy.

The problem of chronic hepatitis B (HCV) in children is urgent due to the ongoing development of the pandemic of this disease among the child population of the whole world [1,8].

ENT disease is one of the most common and dangerous diseases of childhood, it occurs as a complication of viral, respiratory, bacterial, fungal infections. One of the serious complications of childhood HBV infection is the lesion of the ENT organs, where the risk of intracranial complications increases sharply, leading to an unfavorable outcome of the underlying disease [2,6].

Recently, middle ear diseases have been leading in the structure of childhood morbidity worldwide. According to the World Health Organization (WHO), approximately 15-20% of the world's adult population and 10-150.4 children suffer





from some form of otitis media. Among the clinical forms of otitis, acute otitis media accounts for 50-59% in children, while the frequency of chronic otitis media ranges from 5 to 20%, which leads to a high burden on the healthcare system[3,4,9]. Currently, an average of about 400 million people are infected with chronic hepatitis B (HCV), more than 15 0/6 of whom are children. With the combination of CCA and HCV, prerequisites are created for the persistence of the focus of purulent infection, as well as for the progression of liver damage in children.

Timely detection and early treatment of middle ear diseases in children with CHB will provide a favorable prognosis for both diseases, taking into account their mutually aggravating influence. At the same time, the identification of common syndromes and their pathogenesis in CHB and CCA is a priority in the field of pediatrics and otorhinolaryngology [5,7].

Another classic manifestation of CHB that an otorhinolaryngologist may encounter is the development of acute otitis media. This dictates the urgent need to carry out the study.

In this regard, the purpose of this study was to study the features of the clinic and the course of acute otitis media in children with chronic hepatitis B.

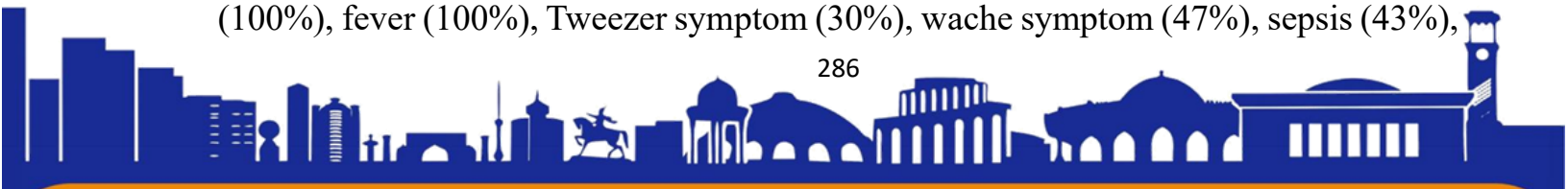
### **Materials and methods of research.**

During the period from May 2021 to July 2023, 60 children with a diagnosis of Chronic viral hepatitis B were under our supervision. The study was conducted on the basis of the regional children's multidisciplinary hospital. The diagnosis of HCV was established on the basis of Order No. 960 of the Ministry of Health. The material of the study was 60 sick children under 14 years of age with HIV infection in 2021-2023. Boys make up 32 (53.3%) of patients, and girls 28 (46.7%).

The children were examined regardless of the presence of complaints. In addition to standard research methods (general blood, urine, bacteriological and biochemical studies), we conducted a thorough otorhinolaryngological examination (otoscopy, anterior rhinoscopy, laryngoscopy, accumetry, impedance measurement, audiometry, vestibulometry) for all children, and X-ray examination in 8 (13.4%).

### **Results and their discussions.**

As a result of the analysis of the data obtained by us, it was found that the most common signs of acute otitis media in children are: ear pain (100%), suppuration (100%), fever (100%), Tweezer symptom (30%), wache symptom (47%), sepsis (43%),





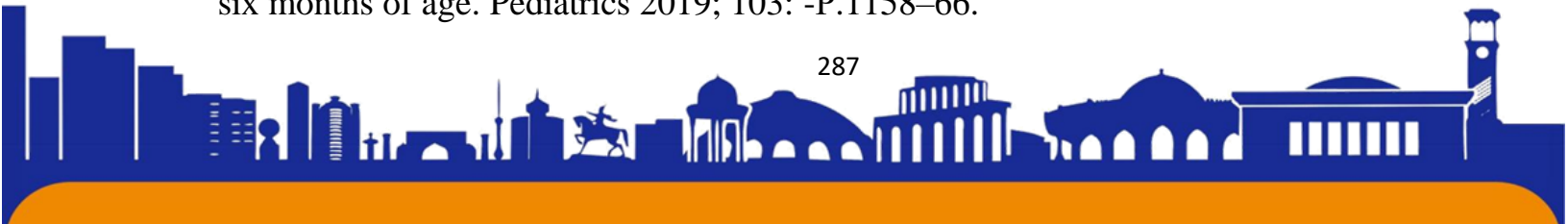
the phenomenon of meningism (17.7%), convulsions (42%), breast rejection (29.4), toxicosis (12%), exicosis (56%), nasal discharge (29.4%) and malaise (5.6%). Most of the children had candidiasis lesions of the middle ear.

The peculiarity of the clinical manifestation of acute otitis media in children, in our opinion, is primarily due to both the biological properties of the virus (rapid replication, damage to immunocomponent cells, high genetic variability) and the anatomical and physiological characteristics of the child's body. These include the inability to develop an adequate immune response against the hepatitis B virus, a large number of target cells for the virus, physiological immaturity of various systems and organs, including the middle ear. As a result, children have a more rapid formation of a deep immunodeficiency state (IDS) and severe multiple organ pathology, including a wide range of virus-associated (basic symptoms), opportunistic infections, malignant tumors, which causes difficulties in the clinical diagnosis of HCV in childhood.

Thus, the results of this study suggest that the clinic and course of acute otitis media in children are similar to those of uninfected children, that is, when choosing antibacterial therapy, doctors should follow the same recommendations as when treating CCA in immunocomponent children.

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