

## CLINIC OF ACUTE OTITIS IN CHILDREN ON THE BACKGROUND OF TYPE 1 DIABETES

*Kurbonov M.K.*

*Bukhara State Medical University, Bukhara, Uzbekistan*

**Summary.** The purpose of this study is to study the features of the clinic and the course of acute otitis media in children with type- 1 diabetes mellitus. 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 type- 1 diabetes mellitus 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, type- 1 diabetes mellitus, children, antibiotic therapy.

The problem of type- 1 diabetes mellitus 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, 12, 14, 16, 20].

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, 11, 15, 19].

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 10-15.4 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, 13, 15, 17]. Currently, an average of about 400 million people are infected with type- 1 diabetes mellitus, more than 15 0/6 of whom are children. With the combination of AOM and type- 1 diabetes mellitus, 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 type- 1 diabetes mellitus 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 type- 1 diabetes mellitus and AOM is a priority in the field of pediatrics and otorhinolaryngology [5, 7, 10, 16, 19].

Another classic manifestation of type- 1 diabetes mellitus 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 type- 1 diabetes mellitus.

Materials and methods of research. During the period from May 2021 to July 2023, 60 children with a diagnosis of type- 1 diabetes mellitus 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, audiometry, 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 type- 1 diabetes mellitus 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 AOM in immunocomponent children.

#### LITERATURE:

1. Azova E.A. Complications of type 1 diabetes mellitus in children and adolescents: regional monitoring, optimization of medical care // International Endocrinological Journal. 2019. - No. 4.-P. 24-28.
2. Kosyakov S.Ya., Lopatin A.S. Modern principles of treatment of acute moderate, prolonged and recurrent acute otitis media. //RMZH.-2002.-No. 20.-P.903–909.
3. Kryukov A. I., Turovsky A. B. Clinic, diagnosis and treatment of acute inflammation of the middle and outer ear //www.MedLinks.Ru.-2010.-P.43-45 .
4. Narzullaev N.U. Clinical and epidemiological characteristics of acute otitis media in HIV-infected children. Tibbietda yangi kun. No. 2 (26). Tashkent 2019.-P.227-229.
5. Narzullaev N.U. Cytokine profile of children with acute inflammation of the middle ear in acute respiratory disease on the background of treatment. Dr. Akhborotnomasi. №2. Samarkand. 2019.-P.80-83.

6. Daly KA, Brown JE, Lindgren BR et al. Epidemiology of otitis media onset by six months of age. *Pediatrics* 2019; 103: -P.1158–66.
7. Dowell, S. F., Butler, J. C., Giebink, G. S. et al. Acute otitis media: management and surveillance in an era of pneumococcal resistance – a report from the Drug-resistant *Streptococcus pneumoniae* Therapeutic Working Group. *Pediatr. Infect. Dis. J.* 18 (2009).-P.1–9.
8. Healy GB. Otitis media and middle ear effusions. In: Ballenger JJ, Snow JB, Ed. *Otorhinolaryngology: Head and Neck Surgery*. 15th edition. Baltimore: Williams & Wilkins, 2006.-P.1003–1009.
9. Marchisio, P., Principi, N., Sorella, S., Sala, E. & Tornaghi, R. Etiology of acute otitis media in human immunodeficiency virus-infected children. *Pediatr. Infect. Dis. J.* 15 (2016).-P.58–61.
10. Davlatov S. et al. Intraoperative determination of the level of amputation in patients with diabetic foot syndrome //Solution of social problems in management and economy. – 2023. – Т. 2. – №. 13. – С. 140-151.
11. Davlatov S. S. The review of the form of neuropathic diabetic foot // Science and education issues. – 2021. – №. 24 (149). – С. 28-42.
12. Ikhtiyarova G. A. et al. Pathomorphological changes of the placenta in pregnant women infected with Coronavirus COVID-19 //International Journal of Pharmaceutical Research (09752366). – 2020. – Т. 12. – №. 3.
13. Sulaymonovich D. S., Zarifivich K. B. The state of regional blood flow in diabetic foot syndrome //Биология ва тиббиёт муаммолари. – 2022. – №. 4. – С. 137.
14. Davlatov S. S., Khamdamov B. Z., Teshayev S. J. Neuropathic form of diabetic foot syndrome: etiology, pathogenesis, classifications and treatment (literature review) //Journal of Natural Remedies. – 2021. – Т. 22. – №. 1 (2). – С. 147-156.
15. Davlatov S. S. et al. Modern Approaches to The Treatment of Patients with Ventral Hernias and Simultaneous Pathologies //International Journal of Pharmaceutical Research (09752366). – 2020. – Т. 12. – №. 3.
16. Davlatov S.S. The review of the form of neuropathic diabetic foot// Science and education issues № 24 (149), 2021. – С. 28-42.
17. Dadajonov E.M., Safargaliyev F., Isomitdinov B. Sh. Specifics of the course of acute calculous cholecystitis in patients with diabetes mellitus.// Университетская наука: Взгляд в будущее. (Курск). - 2016. Volume 1. - P. 246-250.
18. Eronov Yo.Q. The dynamics of the prevalence of diabetes and the study of dental status in children of the bukhara region// AJMR ISSN 2278-4853. - 2019. Vol. 8 – P. 95-100.
19. Kamalova F.R., Rakhmatova D.R., Turaeva F.A., Eronov Yo.Q., Eshonkulov G.T. The dynamics of the prevalence of diabetes and the study of dental status in children of the bukhara region// Ajmr-november. - 2019. Vol. 4.09. - P. 151-153.