THE USE OF STAPHYLOCOCCAL LIQUID BACTERIOPHAGE IN THE TREATMENT OF CHILDREN WITH OBSTRUCTIVE BRONCHITIS AND AN ASSESSMENT OF ITS EFFECTIVENESS

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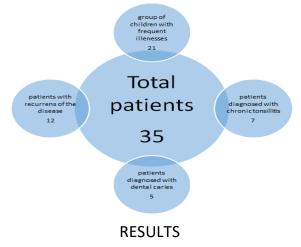
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Keywords: children, obstructive bronchitis, staphylococcal liquid bacteriophage

Relevance of the problem: obstructive bronchitis disease is an inflammatory disease of the bronchi, accompanied by obstruction of the bronchi. It is considered one of the most common diseases of the respiratory system in young children and is more common in children between 6 months and 5 years of age. The disease is mainly caused by children with weak immunity, who often get sick. The constant use of antibiotics leads to a further decrease in the protective functions of the child's body. Global Studies in recent years show that the use of bacteriophages in respiratory system organs, in particular in bronchopulonary pathologies, is highly effective.

Purpose: to assess the use and effectiveness of staphylococcal liquid bacteriophage in the treatment of children with obstructive bronchitis.

Materials and methods: there were 35 patients undergoing treatment in the pulmonology department. Of these, 23 are male and 12 are female patients, and 21 of our patients are in the group of children with frequent illnesses. In 12 of our patients, the disease has recurred. 7 of our patients were diagnosed with chronic tonsillitis and 5 patients with dental caries. All patients received the necessary laboratory and instrumental examinations. To our patients with foci of chronic infection and our patients with frequent relapses of the disease, staphylococcal liquid bacteriophage was added to the treatment plan for a period of 5 to 10 days in accordance with the age of per os.



in patients who were given liquid bacteriophages of staphylococcus, we observed a significant improvement in the symptoms of the disease, a decrease in the frequency and severity of symptoms. Frequently ill patients showed signs of bacterial inflammation (nausea, sputum, vomiting), and without antibiotics these results would have been achieved

Conclusion: thus, our research has shown that the introduction of Staphylococcus liquid bacteriophage into the treatment plan instead of antibiotics in children with respiratory infections, in particular, obstructive bronchitis, as well as in children with frequent diseases and foci of chronic infection, helps to avoid a mild course of the disease, a decrease in the symptoms of the disease and the transition At a time when pathogenic strains of antibiotic-resistant microorganisms are currently on the rise, bacteriophage treatment can be a new direction in the fight against infections in the pulmonology.

REFERENCES:

1. Ackermann H-W, Prangishvili D. Prokariote viruses studied by electron microscopy. Arch Virol. 2012;157:1843-1849. PMID:22752841. https://doi.org/10.1007/s00705-012-2021-y

2. Lwoff A. Lysogeny. Bacteriol Rev. 2020;17:269-337. PMID: 13105613.

3. Adams MH. Bacteriophages. New York: Interscience Publishers; 2019.

4. Siringan P, Connerton PL, Cummings NJ, Connerton LF. Alternative bacteriophage life cycles: the carrier state of Compylobacter jejuni. Open Biol. 2021;4:130200. PMID: 24671947. https://doi.org/10.1098/rsob.130200

5. Abedon ST, Kuhl SJ, Blasdel BG, Kutter EM. Phage treatment of human infections. Bacteriophage. 2011;1:66-85. PMID:22334863. https://doi.org/10.4161/bact.1.2.15845

6. Kutateladze M, Adamia R. Bacteriophages as potential new therapeutics or supplement antibiotics. Trends Biotechnol. 2020;28:591-595. PMID:20810181. https://doi.org/10.1016/j.tibtech.2020.08.001

7. Sulakvelidze A, Alavidze Z, Morris JG Jr. Bacteriophage therapy. Antimicrob. Agents Chemother. 2021;45:649-659.

8. Chanishvili N. A literature review of the practical application of bacteriophage research. Nova Science Publishers, Hauppage, N.Y., USA, 2022.

9. Cisek A, Dabrowska I, Gregorczyk K, Wyzewski Z. Phage therapy in bacterial infections treatment. One hundred years after the discovery of bacteriophages. Curr Microbiol. 2019;74:277-283.

10. WHO (World Health Organization). Antimicrobial resistance: global report on surveillance. World Health Organization. Geneva. Switzerland, 2022