

MODERN APPROACHES TO THE TREATMENT OF BACTERIAL PNEUMONIA IN CHILDREN

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Abstract: From year to year, diseases of the respiratory system occupy a leading place in their prevalence among children of various age categories. Despite the extremely wide range of antibacterial drugs on the modern pharmaceutical market, the chosen treatment strategy does not always lead to achieving the set goal. For example, community-acquired pneumonia at the moment still remains one of the main causes of death among children at an early age everywhere, which indicates the need for a detailed consideration of the drugs most often used in pediatric practice, identifying aspects of effectiveness or, conversely, their unsuccessful use [4]. When comparing two regimens of antibacterial therapy for community-acquired pneumonia in young children, there are no differences in the dynamics of clinical manifestations and length of hospital stay. Conducting rehabilitation therapy on an outpatient basis after pneumonia prevents relapses of acute respiratory diseases [1].

Key words: community-acquired pneumonia, children, treatment

Relevance. Community-acquired pneumonia (CAP) is one of the common infectious diseases of the respiratory tract in children. From the standpoint of evidence-based medicine, antibacterial therapy is the only rational method of treating mild CAP in children [5]. The duration of treatment for moderate forms of CAP is 10–14 days. In most cases, with CAP, children are prescribed antibacterial drugs via parenteral administration, which is quite psychologically traumatic for children [3].

Purpose of the study. To determine the effectiveness of a stepwise method of antibacterial therapy in young children with CAP, when treatment begins with parenteral administration and then switches to oral antibiotic administration.

Material and research methods. Under our supervision there were 40 children aged from 1 year to 3 years old with a diagnosis of moderate acute CAP. The diagnosis was established on the basis of clinical symptoms: an increase in temperature to 38.0 °C for more than 3 days, symptoms of moderate intoxication, the presence of shortness of breath in the absence of signs of obstruction, retraction of the intercostal spaces, cyanosis of the nasolabial triangle, local dullness on percussion, asymmetry of auscultatory changes (moist rales, crepitus). The diagnosis of pneumonia was confirmed by X-ray examination with the identification of homogeneous foci of infiltration; when examining peripheral blood, the presence of acute inflammatory changes in the hemogram was noted (ESR, leukocytosis, neutrophilosis, shift of the formula to the left).

Research results. All children were divided into two groups: group 1 - 20 children who received antibacterial therapy with parenteral administration of the drug, group 2 - 20 children who received antibiotics in the first days of the disease in case of severe intoxication, hyperthermia parenterally, and with positive dynamics of clinical manifestations after 3–5 days we switched to oral antibiotics. Children in both groups were identical in clinical symptoms, disease severity and age composition.

The most common causes of CAP are *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Mycoplasma pneumoniae* [1], therefore, when prescribing antibiotics, the sensitivity of these pathogens was taken into account [1, 2, 4], drug tolerability, as well as antibacterial therapy that the child received in the previous 2–3 months. [1, 2, 4]. 10 children of the 1st group received ampicillin/sulbactam at a rate of 150 mg/kg/day (100 mg/kg ampicillin and 50 mg/kg sulbactam), 10

children received zinacef (cefuraxime-axetil) parenterally at a rate of 60 mg/kg/day within 8–10 days. In the 2nd group, 8 children received ampicillin/sulbactam, 12 children received zinacef in the same dosages for 3–4 days with parenteral administration of the antibiotic, and subsequently, when the symptoms of intoxication were relieved and their condition improved, they switched to oral administration of Augmetin at the rate of 40 mg /kg/day and zinnat 30 mg/kg/day in 2 divided doses with drug replacement according to the therapy started. Oral antibiotics continued for 5–6 days, the total duration of antibacterial therapy did not exceed 8–10 days. In both groups, antibacterial therapy continued for 2 days after temperature normalization.

Complex pathogenetic therapy did not differ in both groups; depending on the clinical manifestations, detoxification therapy was carried out orally; only in isolated cases was intravenous infusion therapy performed (10 patients on the first day of admission). According to indications, antipyretic, expectorant, desensitizing drugs, vitamins, inhalations, physiotherapy, massage and exercise therapy were prescribed after the temperature normalized. Antipyretics were not systematically prescribed, since their simultaneous use with antibiotics may make it difficult to assess the effectiveness of antibacterial therapy. Antipyretic drugs were used only for children with premorbid indications for reducing fever (hypoxic-traumatic lesions of the central nervous system in the perinatal period, febrile convulsions).

The criteria for sufficient antibacterial therapy were a decrease in temperature and intoxication, a decrease in the phenomena of respiratory failure, the absence of purulent sputum, an improvement in the study of peripheral blood, a decrease in the number of leukocytes, neutrophils, juvenile forms).

When comparing the dynamics of observation of the clinical symptoms of CAP in children in the two observed groups, no differences were revealed. Thus, signs of intoxication and elevated temperature decreased after 5–6 days, shortness of breath and signs of respiratory failure - on days 6–7, signs of clinical recovery were noted on days 11–12 of admission to the hospital, when peripheral blood parameters were characterized by a decrease in leukocytosis, neutrophyllosis, disappearance a shift of the formula to the left, a decrease in ESR, in 12 children the blood test results were within the conventional standards. The duration of hospital stay for children in both groups was 12–14 days, in group 1 on average 11.75 ± 0.5 days, in group 2 - 12 ± 0.4 days.

Considering the lag in morphological recovery from clinical recovery in acute pneumonia, upon discharge, rehabilitation therapy was prescribed: eubiotics (lactobacillus preparations, bifid-containing preparations), a complex of vitamins to all patients; for children (10 people) with a history of frequent respiratory diseases, a course of IRS19 intranasally for 2 weeks, Viferon-1 for 7–10 days (4 children), polyoxidonium intranasally or sublingually (4 children). Rehabilitation therapy was carried out on an outpatient basis. Follow-up observation 1 and 3 months after discharge from the hospital did not reveal any deviations in the condition of the children in both groups; there were no recurrent respiratory diseases in all children.

Conclusion. The observations showed that when comparing two regimens of antibacterial therapy for community-acquired pneumonia in young children (parenteral administration of antibiotics and a sequential regimen from parenteral administration of antibiotics during the period of severe intoxication with a transition to oral administration), there are no differences in the dynamics of clinical manifestations, duration of stay in hospital. Conducting rehabilitation therapy on an outpatient basis after pneumonia prevents relapses of acute respiratory diseases.

BIBLIOGRAPHY:

1. Mirzakarimova, D., Ya M. Yuldashev, and Sh T. Abdukodirov. "Factors biochemical morphological given toxic hepatitis, depending on treatments." RE-HEALTH JOURNAL 2, no. 6 (2023).

2. Pakirdinov, A. S., M. M. Madazimov, and D. A. Abdukadirov. "FEATURES OF GASTRIC AND DUODENAL ULCERS IN ELDERLY PATIENTS." *World Bulletin of Public Health* 13 (2022): 63-66.
3. Isanova, D., Azizov, Y., Mirzakarimova, D., Abdukodirov, S., Kayumov, A., & Solieva, M. (2021). Spectrum of pathogens derived from women diagnosed with urinary tract infections. *International Journal of Current Research and Review*, 13(1), 2-6.
4. Abdullaeva, M. E. "Abdukodirov Sh. T., "Features of thermal control of children of the first year of life and interrelation with growth and development of the total, segmentary sizes of the body".*International Journal of Early Childhood Special Education (INT-JECS)* DOI 10.
5. Abdukodirov Sh.T., "The Main Etiological Factors, Methods of Prevention and Treatment of Meningitis" - *International Journal of Scientific Trends - (IJST)* Volume 2, Issue 2, February, 2023. PAGE 141-148
6. Mamarasulova, D. Z., Urmanbaeva, D. A., Khasanov, D. S., & Abdukodirov, S. T. (2023). THE ROLE OF CIN-DIAG RAPID TEST IN SCREENING FOR CERVICAL EPITHELIUM PATHOLOGY. *International Journal of Advance Scientific Research*, 3(09), 150-158.
7. Мирзакаримова, Д. Б., & Абдукодиров, Ш. Т. (2022). ОСОБЕННОСТИ ТЕЧЕНИЯ ОСТРОГО БРОНХИОЛИТА С ЦИТОМЕГАЛОВИРУСНОЙ ИНФЕКЦИЕЙ. *Экономика и социум*, (3-1 (94)), 367-372.
8. Байханова, Н., & Абдукодиров, Ш. Т. (2021). ВЗАИМОСВЯЗЬ ВИРУСНОЙ ИНФЕКЦИИ В РАЗВИТИИ АНТИФОСФОЛИПИДНОГО СИНДРОМА ПРИ СИНДРОМЕ ПОТЕРИ ПЛОДА. *Экономика и социум*, (4-1 (83)), 691-693.
9. Мирзакаримова, Д. Б., Абдукодиров, Ш. Т., Ходжиматова, Г. М., & Каюмов, А. М. (2022). ОСОБЕННОСТИ ТЕЧЕНИЯ ОСТРЫХ ВИРУСНЫХ ГЕПАТИТОВ У ДЕТЕЙ. *Экономика и социум*, (3-1 (94)), 373-377.