CLINICAL FEATURES OF SALMONELLOSIS IN CHILDREN

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Abstract. Salmonellosis and bacterial dysentery caused by polyresistant strains in children are characterized by a high degree of severity and complications. Premorbid and concomitant diseases were observed more often in salmonellosis caused by polyresistant strains in children. It was found that intoxication and gastrointestinal symptom complexes in diseases caused by polyresistant strains of salmonellosis are more severe and last longer than usual and cause severe changes in the gastrointestinal tract.

Relevance of the topic. The study of severe progression, complications, and fatal outcomes of acute infectious intestinal diseases remains one of the most pressing issues in modern infectious disease science. It is well known that the course of infectious diseases is determined by the virulence, toxigenicity, immunogenicity, and antibiotic resistance of pathogens, as well as the immunobiological activity of the host organism and the direct impact of environmental factors. In recent years, the clinical course and epidemic processes of infectious diseases, especially intestinal infections, have changed significantly.
Consequently, their etiological diagnosis has become more complex. Traditional causative agents — *Salmonella* and *Shigella* — still play a significant role in the development of acute infectious intestinal diseases . The severe and prolonged course of these infections in humans, particularly in children, has led to an increase in mortality rates, which continues to drive ongoing research efforts in the field .

Objective of the Study: To study the clinical features of the disease in children infected with *Salmonella Typhimurium* strains that are polyresistant (main group) compared to those infected with antibiotic-sensitive *Salmonella Typhimurium* strains (control group).

Materials and Methods: The clinical course of illness was studied in children infected with polyresistant *Salmonella Typhimurium* (main group) and those infected with antibiotic-sensitive strains (control group).

Results and Discussion: Among the children under observation, 91.4% in the main group and 92.8% in the control group were between 1 and 3 years of age. No mild forms of salmonellosis were observed. Moderate and severe forms were predominantly recorded in both groups, particularly among children aged 1–3 years. However, in the main group (polyresistant strains), 58.5% of cases were severe,

whereas in the control group (antibiotic-sensitive strains), 60.0% of cases were of moderate severity.

All diagnoses were bacteriologically confirmed. Notably, in both groups, the gastroenterocolitic form of the disease was the most common (62.9% and 71.4%, respectively).

Analysis of hospitalization timing showed that control group patients were admitted on days 3–5 of illness, while 76.0% of the main group were hospitalized within the first1–2days. Among 54 (92.9%) children hospitalized with salmonellosis, the preliminary diagnoses included acute diarrhea, acute intestinal infection, acute dysentery, and dysbacteriosis. Most patients (74.2%) were treated during the summer and autumn months.The main group showed a higher prevalence of premorbid conditions such as anemia and exudative-catarrhal diathesis. The disease caused by antibiotic-resistant strains began acutely and was accompanied by pronounced signs of intoxication (weakness, lethargy, irritability, loss of appetite, sleep disturbances, nausea, vomiting). The severity of clinical signs correlated with diseaseseverity. Data indicate that in cases caused by polyresistant strains, intoxication and gastrointestinal symptoms were more severe and lasted longer.All children initially presented with fever, lethargy, weakness, and chills. The duration of fever correlated with disease severity and averaged 4.6±2.5 days in the main group and 4.1±2.4 days in the control group. Inflammatory signs in the gastrointestinal tract were also assessed and found to persist longer in the main group than in the control group. However, the occurrence of typical salmonellosis symptoms was similar in both groups.In the next phase of the study, coprological indicators were analyzed in both groups. Moderate changes were observed in 28.6% of stool samples from the control group with moderately severe disease. Marked coprological changes were seen only in moderate and severe cases from the main group (15.7% and 28.6%, respectively). These findings suggest that salmonellosis caused by polyresistant strains leads to more pronounced gastrointestinal changes.

Conclusion: When assessing comorbidities in children with salmonellosis, no significant differences were found between the groups in the occurrence of ARVI, pneumonia, bronchitis, gastroduodenitis, or intestinal dysbiosis. However, salmonellosis caused by polyresistant strains is characterized by more intense and prolonged intoxication and gastrointestinal symptoms, along with more severe gastrointestinal damage.

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