Acute intestinal infections in children are the most common diseases in pediatric practice. In recent years acute intestinal diseases take second place among all infectious diseases in children, give in respiratory tract disease. These diseases take third place in frequency of the cause of death in the group of children under 5 years. Every year 1 million children die from acute intestinal infections in the world. In recent years, salmonella takes leading place among invasive diarrhea, especially in the group of early age children. Salmonellosis takes a leading place in the structure of diarrheal bacterial diseases, in Ukraine during 2009-11 years the morbility of salmonellosis is characterized by increasing. However, about 165 million cases of shigellosis is registered in the world annually, including 70% of cases observed in children under 5 years. Known, that the shigellosis causes the death of 1 million patients annually, two-thirds of them are children. The disease can run in severe, with high mortality, nosocomial spread. Refinements of etiologic diagnosis of acute intestinal infections occurring on the results of a bacteriologic examination of excrement, but the execution of the research requires several days, and the final conclusion is deferred in time.

**The aim of the study** was to determine the current epidemiological and clinical laboratory peculiarities of invasive diarrhea in children.

**Material and methods.** In the infectious boxed department of intestinal infections in Regional Children's Clinical Hospital (Chernivtsi) were examined 109 children who suffered from acute intestinal infection, caused by obligate pathogenic flora, in particular, 76 patients with salmonellosis and 33 children with a diagnosis of shigellosis. The diagnosis of salmonellosis and shigellosis established on the basis of complex evaluation of clinical, epidemiological and laboratory data. Treatment of children of both clinical groups was performed according the Clinical Protocol of acute intestinal infections in children, approved by Ministry of Health of Ukraine.

**Results and discussion.** The average age of children in the I group was 3,7±0,5 years, children in the second group - 7,1±0,7 year, the residents of Chernivtsi and other region towns dominated in both groups by (57,9% and 66,7% in the first and second groups, respectively). The largest part of hospitalized children in the I group had age of 1-3 years (40,1%), while among hospitalized children with shigellosis primary school age patients took a predominance place (33,3%).

As the analysis of anamnestic data, most cases were associated with the food factor and alimentary transmission route of infection (65,7% and 66,7% of cases in I and II clinical groups
respectively), smaller epidemiological significance had previous contact with a patient with bowel movements disorders (2.6% and 15.5% of children in I and II groups, respectively). The leading etiological factor of the disease in children and the group was S.typhimurium (61.8%), the rest of this group of patients allocated S.enteritidis (38.2%). However, in the second clinical group domineering etiological factor was Sh.sonnet (90.9%), rarely - Sh.flexneri (9.1%).

Analysis of clinical and laboratory data testified that in modern conditions the course of these bacterial intestinal infections in children characterized by typical signs of a lesion in the gastrointestinal tract with the development of invasive diarrhea.

Salmonellosis in children characterized by typical symptoms of bacterial lesions in the gastrointestinal tract with the development of local gastrointestinal form of the disease (gastroenterokolitis variant in 57.9% of cases). The course of disease in the vast majority of children (86.9% and 90.9% in the I and II clinical groups, respectively) was moderate, severe variant of course noted the in 9.2% of patients with salmonellosis and 9.1% of children with shigellosis. In 89.2% of patients the start of disease was accompanied by the fever reaction (febrile values in 57.9% of children) and manifestations of gastrointestinal tract dysfunction as the diarrhea (77.6%) and the vomiting (57.9%). In children with salmonellosis, the average duration of diarrhea during treatment was 5.9±0.4 days, the average duration of vomiting was significantly shorter (1.7±0.2 days).

In the vast majority of children with shigellosis, a disease proceeds in the colitis form (75.8%) with significant cytoscopic signs of distal colon inflammation.

Laboratory hematology indices in children with salmonellosis were characterized by tendency to mild anemia and leukocytosis with expressive regenerative shift. Signs of leukocytosis (51.6%) and regenerative shift (85.5%) were inherent in most patients of I clinical group. Meanwhile, in the representatives of II clinical group leukocytosis was observed in 72.3% cases, regenerative shift was observed in 87.9% patients.

Due to microscopic examination of faeces more expressive microscopic signs of inflammatory lesions of the distal colon were observed in children with shigellosis, than in children of I clinical group.

Conclusion.

In modern conditions, salmonellosis in children characterized by typical symptoms of bacterial lesions of the gastrointestinal tract with the development of local gastrointestinal form of the disease (gastroenterokolitis variant in 57.9% of cases), mainly, moderate (86.9%). The
main etiological factors of salmonellosis were *S.typhimurium* and *S.enteritidis* in frequency ratio as 3:2.

In the vast majority of children with shigellosis, a disease proceeds in the colitis form (75.8%) and moderate severity (90.9%) with significant cytoscopic signs of distal colon inflammation. The predominance etiological factors of shigellosis were *Sh.sonnei* and *Sh.flexneri* in the ratio as 9:1.

Laboratory hematology indices in both groups were characterized by insignificant leukocytosis with significant regenerative shift and the tendency to anemia in children with salmonellosis.