



($P < 0.05$). In the presence of the herpes virus in the body of HIV-infected immunoregulatory index is reduced (-0.67 ± 0.29) in II, (0.48 ± 0.17) in III and (0.23 ± 0.11) in IV clinical stage immunodeficiency, respectively, against (2.09 ± 0.20) in herpes infection ($P < 0.02$). It is likely that the presence of the herpes virus in the body of HIV-infected people provides some competitive effect on regulatory subpopulations.

In patients with HIV and herpes coinfection, the ratio of serum concentrations of IL-8, IL-10, IL-12 and IL-17 undergoes maximum imbalance. Moreover, the content of not only pro-inflammatory cytokines IL-8 and IL-17, but also anti-inflammatory IL-10 increases significantly. Thus, the level of IL-8 fluctuated in the range ($62,17 \pm 15,84$)-($244,10 \pm 51,11$) pg/ml, and IL-10-from ($2,131 \pm 0,622$) pg/ml in the I clinical stage HIV infection to ($6,863 \pm 1,312$) pg/ml in IV (terminal).

At the same time, the level of pro-inflammatory IL-12 is significantly reduced in patients with severe immunosuppression-up to (1.30 ± 0.67) pg/ml, which not only differed from that in healthy individuals ($P < 0.05$), but also in patients for herpesvirus monoinfection- (5.40 ± 1.52) pg/ml ($P < 0.05$). At the same time, the serum level of the anti-inflammatory cytokine IL-10 increases significantly ($P < 0.05$), regardless of the clinical stage of HIV infection.

Therefore, the results obtained indicate a lack of cellular and humoral components of immunity in patients with HIV-associated herpes infections. The combination of altered immune factors leads to the active persistence of herpes viruses in humans and the recurrence of the disease. Given this, the treatment of various clinical forms of herpes infections should be aimed not only at modulating the cell, but also at activating the humoral part of the immune system.

Sorokhan V.D.

PROBIOTICS AND ReO-WATER IN COMPLEX TREATMENT OF PATIENTS WITH SALMONELLOSIS

*Department of Internal Medicine and Infectious Diseases
Bukovinian State Medical University*

One of the leading places among infectious diseases is occupied by acute enteric infections in general, and salmonellosis in particular. The problem of salmonellosis treatment is related to the microbiocenosis, the microflora of which is the primary target of exogenous flora and its aggression factors. It is known that in 100% of patients with salmonellosis in the first days the dysbacteriosis of varying severity is determined and characterized by clinical and laboratory syndrome with changes in the qualitative and /or quantitative composition of the intestinal microflora.

The aim of our study was to study the effectiveness of the probiotic LACTO in combination with ReO-water in the treatment of salmonellosis.

Research objectives: to study the effectiveness of basic therapy in combination with probiotic Lacto and ReO-water in patients with salmonellosis on clinical-laboratory and microbiological indicators. On the basis of the received data to define expediency of use of these drugs at patients with samonellosis.

Collection of material for dysbacteriosis: material for examination - feces were delivered without preservative not later than 2 hours after collection. The material was delivered to the microbiological laboratory of the Regional Municipal Non-Profit Enterprise "Chernivtsi Regional Clinical Hospital", where a comprehensive microbiological study was performed.

12 patients with salmonellosis were examined. Clinical and laboratory studies were performed. Changes in the microbiocenosis of the colon were found in all patients: a decrease in the number of lactobacilli, bifidobacteria, the total amount of E. coli. The content of lactobacilli $< 10^6$ Log₁₀ CFU/gram of **feces** was observed in 4 patients and only one patient approached the norm of 10^7 Log₁₀ CFU/gram (norm $> 10^6$ Log₁₀ CFU/gram); bifidobacteria was $< 10^7$ Log₁₀ CFU/gram in 3 patients, and in 2 patients it approached to normal value ($> 10^7$ Log₁₀ CFU/gram). There was also a decrease in the total amount of E. coli $< 10^6$ Log₁₀ CFU/gram in 1 person.

In addition to basic treatment, patients were additionally given by Lacto 1 capsule PO TID in 30 minutes before meals for 5 days in combination with ReO-water PRN.



Thus, it was noted that in patients who received Lacto and ReO-water, the symptoms of intoxication (fever, weakness) disappeared sooner. Analysis of clinical manifestations of the gastrointestinal tract revealed a more pronounced effect obtained when using such a combination, which manifested a faster normalization of bowel movements, the disappearance of abdominal pain.

Sydorchuk A.S.

**EFFICACY OF PROBIOTIC LACTO AND REO IN HOLIATRY OF PATIENTS WITH
ACUTE GASTROENTEROCOLITIS PRESUMBLY OF VIRAL ETIOLOGY**

*Department of Internal Medicine and Infectious Diseases
Bukovinian State Medical University*

Social and economic situation that take place in Ukraine within last times have caused the increase of infectious diseases, including also gastroenterocolitis of likely viral etiology, which are the most distributed among persons of working age. Endoecological understanding of interaction of human microflora, in particular, intestinal and macroorganisms is receiving more and more experimental and clinical evidence of its feasibility in various infectious conditions. Disorders of the intestinal microflora are characterized by the disappearance or reduction of its obligate representatives and an increase in the population level of opportunistic pathogens (enterobacteria, staphylococci, fungi of the *Candida* genus, and others), which are normally absent or occur in small quantities.

The research aim was to study the effectiveness of the probiotic Lacto in combination with ReO in patients with different ages and genders with a clinical diagnosis of acute gastroenterocolitis, presumably of viral origin.

Research tasks: to study the effectiveness of the use of the basic therapy in combination with the probiotic Lacto and rehydration oral solution ReO in patients with acute gastroenterocolitis presumably of viral origin by clinical and laboratory parameters. Based on the results obtained to determine the feasibility of using these drugs in patients with acute gastroenterocolitis, presumably of viral etiology.

On the basis of the section of intestinal infections of the infectious stationery of Regional municipal non-profit institution “Regional Clinical hospital” of Chernivtsi conducted clinical and laboratory investigations of 11 patients with acute gastroenterocolitis, presumably of viral etiology. Patients admitted urgently to the admission department of the infectious hospital with typical complaints of acute intestinal infection (predominantly with gastroenterocolitis syndrome). After hospitalization, medical care provided according to standards. The involved patients informed and agreed to the proposed regimen of treatment. The study of the intestinal microbiocenosis involved the defining of qualitative composition and population level of the main representatives; the presence of pathogenic microflora, the total number of *Escherichia coli*, opportunistic enterobacteria, staphylococci, fungi of the *Candida* genus, lactobacilli, bifidobacteria, hemolytic *E. coli* in 7 patients.

There were a decrease in the content of lactobacilli less 10^6 CFU/g of feces in all patients; the number of bifidobacteria was less than 10^7 CFU/g in two patients, in three sick – reached normal (more 10^7 CFU/g). There were also a decrease in the total amount of *E.coli* below 10^6 CFU/g in two patients. In addition to basic therapy, patients were additionally prescribed Lacto as one capsule three times a day 30 minutes before meals for five days in combination with ReO.

Thus, it has been noted that in patients who received Lacto and ReO the symptoms of intoxication – fever, general weakness, dizziness regressed faster. The analysis of clinical manifestations of the gastrointestinal tract revealed a more pronounced effect obtained using this combination, which manifested itself in a faster normalization of the nature of bowel movements (by Bristol scale) and regression of abdominal pain. Patients with acute gastroenterocolitis should be prescribed this treatment regimen.