



UDC 579.842.1/2:616.34-002.44-02

E. COLI, WHICH PLAY A LEADING ROLE IN CHRONIC ULCERATIVE COLITIS

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Introduction: The problem of intestinal infection remains as still relevant because of their wide distribution and relatively low efficiency of chemotherapeutic and immunological remedies which are used in treatment. Nowadays, one of the most current problems is chronic colitis.

Aim: To establish the persistence level of chronic nonspecific ulcerative colitis of enteropathogenic *Escherichia* of colon patients and their meaning in ecological system "macroorganism- microbiota".

Materials and Methods: During 2000-2015 years the bacteriological examination of content of the cavity of of TC patients with UC of the age of 27-41 was conducted (the middle age 37,74±3,62). Among the patients there were 97 (61.78%) women and 60 (38.22%) men. The clinical diagnosis was verified, based on the typical complaints, anamnesis, the results of clinical and laboratory research and instrumental examination with the help of modern informative devices and and tools. The control group consisted of 10⁷ healthy individuals who had not been suffering any disease and taking antimicrobials. The resulting cultures were tested in indicative agglutination reaction with polyvalent serum OKA. The positive culture was tested with polyvalent serum with a narrow range of OKB, OKC, OKD and OKE. Then, the reaction of agglutination cultures with monovalent compound-specific serums was conducted. In some rare cases, for verification of the serovariant *E. coli* the titration reaction if agglutination with OK-monovalent seras was used. For reliability of the results, the control of serum and culture was applied.

The received results ant their discussion: An *Escherichia*'s infection is characterized by expressed polymorphism of the clinical picture which is connected, in our view, not only with protective factors of innate immunity of stricken organism, but also antigenic properties of enteropathogenic *E. coli*. The patients, who have *E. coli* O18ac:K77; O26:K60; O55:K59; O128ab:K67 in their colon cavities, their disease overruns the nosological form oh the colienteritis. The patients, who have selected such serovariants as: O25:K11; O144:K; O124:K72 in their TC cavities (EIEC *Escherichia*) the disease runs as the bacterial dysentery. The disease of some patients, who had *E. coli* O25:K11(4 patients) and O128:K67 (2 patients), occurred in choleric form. The servants, which belong to enteropathogenic *E. coli*, enterotoxigenic *E. coli*, enteroinvasive *E. coli* and to enterohemorrhagic *E. coli* were found in the organisms of patients with chronic nonspecific ulcerative colitis. Most detected were enteropathogenic *E. coli*, which included 10 serovariants, among of which were O114:K90 (consistency index (CI) - 6,37%), O18ac:K77 (CI -5,10%) i O128:K67 (CI -5,10%). Among enterotoxigenic *E. coli* the most common are servants O25:K11 (CI- 6,37%), among enteroinvasive *E. coli* - serovar O124:K72 (CI - 5,73%) and among enterohemorrhagic *E. coli* - O128:K67 (CI -5,10%).

Conclusions: The patients with chronic nonspecific ulcerative colitis often found *E. coli* in their colon cavity, 94.50% of patients, however, in 55 (35.03%) patients the EPEC is persisted , in 41 (26,11%) patients *E. coli* Hly+, y 37 (23,57%) - *E. coli* Lac-, in 18 (11,46%) - ETEC, y 14 (8,42%) - EIEC and in 11 (7,01%) - EHEC. The main serovariants of conditional pathogenic *Escherichia* that colonize and persist the UC in the cavity of the colon of the patients are O114:K90; O25:K11; O124:K72; O128:K67; O18ac:K77, the persistence of which influences the clinical manifestation from colitis to disease like dysentery or cholera.