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MICROBIAL CONTAMINATION OF COLON IN PATIENTS WITH POLYPS OF THE GASTROINTESTINAL TRACT

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Topicality. The microflora of the colon is one of many factors that determine the normal functioning of the intestinal mucosal barrier.

Objective: the aim of the study was to determine the qualitative and quantitative composition of microflora of the colon in patients with polyps of the gastrointestinal tract.

Problem: determine the qualitative and quantitative composition of microflora of the colon in patients with polyps of the gastrointestinal tract.

Material and methods. Examined 35 (35,4 %) healthy individuals (group I) and 64 (64,6 %) patients with polyps of the gastrointestinal tract (group II). Microbial composition of colon studied bacteriological methods (seeding fecal special environment); studied obligate and facultative intestinal flora, its qualitative and quantitative composition.

Results and discussion. In healthy subjects (group I) was found obligate microflora (Bifidobacterium, Lactobacillus and Escherichia coli). Bifidobacterium quantity was 10^9-10^{10} CFU/ml, Lactobacillus – 10^6-10^8 CFU/ml and Escherichia coli – 10^7-10^8 CFU/ml.

In patients with polyps of the gastrointestinal tract (group II) microbiocenosis disturbed bowel: marked changes in the qualitative and quantitative composition of microflora. In the group II of people also found obligate microflora (Bifidobacterium, Lactobacillus and Escherichia coli), but the total number of bacteria and each of them is much reduced (to10^5 CFU/ml or less), as compared with healthy individuals ($p < 0,05$). Reducing the number of obligate flora leads to reduced colonization resistance of the organism and the growth of facultative bacteria (Enterobacter cloacae, Staphylococcus aureus, Klebsiela pneumonisa, Klebsiela oxytoca, Escherichia coli hemolitica), which are absent in healthy individuals.

The normal microflora of intestinal is biosorbents, shows detoxic action is important in the formation of fatty acids (FA) with short chain (izobutyric, propionic, butyric FA). Of short chain fatty acids provide additional regulation of microflora composition and pH of intestinal, contents ensuring the stability of the microflora.

Conclussions:

1 Received results testify on changes qualitative and quantitative composition of intestinal microflora in patients with polyps bowel.

2 In patients with polyps of the gastrointestinal tract marked reduction in obligate microflora (Bifidobacterium, Lactobacillus and Escherichia coli) and the emergence of pathogenic microflora in the gut, which may reflect a decrease in its reactivity and is of practical importance to justify the rational treatment of patients.