

# **BRIEF REPORT: MEDICAL TREATMENT IN DETAILS: USE ENTEROSORBENT FOR MODIFYING THE MICROBIOTA IN PATIENTS WITH DIVERTICULAR DISEASE**

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## **Introduction**

Diverticulosis of the colon is a common condition that afflicts about 50 percent of the adult population by age 60 and nearly all by age 80. The bowel dysbacteriosis usually develops as a result of the diverticular disease, during which the critical changes in quantitative, qualitative, functional and topographic parameters of the intestinal microflora are observed. The disorder of intestinal microbiocenosis exerts a multiple pathogenic action on the human digestive and immune system.

## **Methods**

Enterogel used in dose of 15 g 3 times a day for 10–14 days. During the treatment there were not revealed any complications or side effects in patients. Normal microbial flora is characterized by a high affinity to enterocyte receptors and is tightly attached to them. Pathogenic flora does not possess this property and uses other ways of binding to attach to the mucosal surface. Due to the electrostatic interaction with the surface of Enterogel, the destruction of pathogenic bacteria starts before the contact with the mucosal surface, and components of the bacteria attach to Enterogel.

## **Results**

Enterogel positively supports the bowel colonization by normal microflora and suppresses the alien pathogenic microflora by sorbing the metabolic products of the latter. Enterogel actively adsorbs on its surface the opportunistic and pathogenic microflora, destroying the cell membrane and sorbing the cellular contents. The antimicrobial action of this preparation is sufficiently intensive: 1 g Enterogel adsorbs on its surface more than 10<sup>14</sup> pathogenic bacteria. At the same time, the normal intestinal microflora (lacto-, bifidum-bacteria, E. coli) is neither absorbed from the intestine nor is it inhibited there. The immunomodulative effect has been identified as conditioned by the normalization of eubiosis and the decreased inflammation activity in the intestinal mucosa.

## **Discussion/Conclusion**

A high clinical efficiency of Enterosgel preparation has been determined and its positive effect on the intestinal mucosa condition, digestion and absorption processes, the composition of small and large intestine-related microflora. The immunomodulative effect has been identified as conditioned by the normalization of eubiosis and the decreased inflammation activity in the intestinal mucosa.