# THE ROLE OF PREBIOTICS IN ENHANCING THE EFFECTIVENESS OF ANTIBIOTIC THERAPY FOR ACNE

**S.S. Ledentsova,**
**P.V. Seliverstov,**
**L.S. Oreshko,**
**V.G. Radchenko**

*North-Western State Medical University of Mechnikov, Saint-Petersburg, Russia*

**S.S. Ledentsova,**

Acne is one of the most common diseases of human skin. Acne treatment is carried out depending on severity and include systemic and topical therapy, with correction of the concomitant symptoms of chronic diseases. Distinguish mild, moderate and severe and very severe acne. According to the National recommendations 2015 the first-line drugs in the treatment of severe and very severe form of acne are also systemic retinoids and drugs of the second and third lines of systemic antibacterial drugs. Side effects in the treatment of antibacterial drugs was observed in resistant P.acnes. and intestinal microbiota changes.

**The aim** of our work to study the effect of prebiotic (drug, Zakofalk) on the tolerability and efficacy of systemic antibiotic therapy of acne and prevent the development of antibioticassociated diarrhea (and/or dysbiosis) in the treatment of acne of different severity.

**Materials and methods.** The study involved 45 patients aged from 18 to 37 years, with acne of moderate severity, as confirmed by clinical, laboratory and instrumental methods of examination. All patients were divided into two groups: the core team (CT)-25 patients treated with basic therapy in the form of doxycycline 100 mg a day orally with a total duration of therapy 8 weeks on the background of the drug, Zakofalk in the dosage regimen 1 tab 3 times a day, and the comparison group (HS) of 20 persons receiving only basic therapy. Each group was conducted by physical examination before and after treatment: medical history, clinical analysis of blood (AS), blood biochemical parameters (total protein, C-reactive protein, ALT, AST, alkaline phosphatase, GGTP, amylase,

lipase, glucose, total cholesterol), lipid profile, urine analysis, ultrasound examination of abdominal cavity organs, PCR of feces for dysbiosis. Clinical evaluation of acne therapy were conducted based on the following criteria: severity of erythema, infiltration on a 4-point scale (0 – none; 1 – mild; 2 – expressed; 3 – pronounced); index of the clinical course (severity index), as measured by 4-point system from 0 to 3 points (0 – the number of comedones, papulopustules to 5; 1 is the number of comedones and papulopustules from 5 to 10; 2 is the number of comedones and papulopustules – 10–20; 3 – the number of comedones and papulopustules more than 20). The sum of all the points expressed in the General account (OS), the maximum number is 9. The registration of all parameters was performed before treatment, then weekly until the end of therapy. The observation period for the patients was 8 weeks.

**Results.** After 8 weeks in both groups showed regression of the erythema, reaching the lowest values in all methods of treatment: EXHAUST from 2.4 to 0.6; in the HS – from 2.5 to 0.8 by the end of 8 weeks of treatment. Regression of the infiltration was more significant in patients in the OG: from 2.3 to 0.5 by the 8th week of treatment, whereas in HS to this date, and its value corresponded to 0.9. The number of inflammatory cells decreased significantly by week 8 in both groups: from 2.4 to 1.0 points; from 2.4 to 1.2 points. A more pronounced therapeutic effect was observed when combined treatment in the EXHAUST gas, the total score decreased from 7.35 to 2.6. In the treatment of antibiotic without the support of the above prebiotic dropped from 7.59 to 3.05. By the end of therapy in patients OG clinical recovery was observed in 65.0±7.8% of patients, significant improvement of 20.0±6.2%, improvement in 10,0±4,6%, without effect – 5,0±2,8%, Only a 5.0±2.8% of the cases were reported the ineffectiveness of treatment, which differed from the results of treatment in GS 7±1,8%. The drug is well tolerated by patients, there was no side effect during treatment. In the group of patients who received conventional therapy, the results were as follows: 54,5±10,4%, 13,7±9,2%, 22,7±10,8%, 9,1±1,8% accordingly, gradation. After 2 weeks of inclusion in the study with repeated survey and inspection of the syndrome of intestinal dyspepsia (bloating, rumbling; loose stools more than 3 times per day), induced the

holding of antibiotic therapy, was observed in 5 patients GS (40%), 3 (15%) of them during the first week of treatment refused further antibiotics. In the study of feces in the initial period is quite pronounced changes in the ratio of representatives of the intestinal microflora were revealed in most patients in both groups in the first place was a marked decrease in bifidobacteria and lactobacilli. After a course of antibiotikoterapii the patients, a significant increase in the number of bifidobacteria and lactobacilli and a significant decrease in the number of pathogenic and conditionally pathogenic bacteria. In the GS drew the attention of the inhibition of microbial growth of representatives of the normal intestinal microflora and an increase in the degree of intestinal dysbiosis.

**Conclusions.** Thus, the obtained data confirm the negative effect of standard antibiotic therapy of acne on the microbial composition of the intestines. The inclusion of prebiotics in the traditional method of acne treatment, allows to obtain a more pronounced therapeutic effect compared with using only the standard dermatological treatment regimens and achieve more severe patients adherence to treatment.

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# OSTEOPATHIC CORRECTION AS A METHOD OF PREVENTION OF GALLSTONE DISEASE

*A.Y Oreshko[1,2,3],*
*P.V. Seliverstov[3],*
*D.E. Mokhov[1,2],*
*L.S. Oreshko[3]*

[1] *St. Petersburg State University,*
[2] *Institute of Osteopathy North-Western State Medical*
[3] *University of Mechnikov, Saint-Petersburg, Russia*



**A.Y. Oreshko**

**The aim of the study** to study the effect of osteopathic influence on biomechanical and neural disorders and the functional state of the gallbladder in patients.

**Materials and methods.** Under observation, there were 68 patients with anomalies of the gallbladder and violation of colloidal stability of bile with prospective follow-up from 3 months to 12 months. The study group included 48 patients who underwent osteopathic diagnosis and treatment with frequency of 5–7 sessions. The comparison group consisted of 20 patients treated with the drugs ursodeoxycholic acid for 3 months. Ultrasonographic study was conducted on apparatus "Sonoline Prima LC" firm "Siemens" (Germany), working in real time, using sector and linear transducers 3.5 MHz and 7.5 MHz according to standard methods with the assessment of the size, shape, structure of gall bladder and liver before and after a course of osteopathic influence and homogeneity of bile.

The algorithm of osteopathic diagnosis. Osteopathic diagnosis includes the following tests: fascial listening (global, local), the definition of cranio — sacred synchronicity, the definition of mobility at the level of the cervical, thoracic, lumbar spine, sacrum, the definition of mobility of the thoracic and pelvic diaphragms, the definition of mobility and mailnote of the liver, gallbladder, stomach, duodenum, small intestine and colon, determining whether a voltage and/or pain at the level of the sphincter of Oddi, pyloric stomach, duodeno-analnogo sphincter, ileocecal valve, in the region of the gallbladder, in the course of the common bile duct.

The algorithm of osteopathic impact. In the treatment of patients with padkamenne stage with