

According to the experts of facial surgery, botulinum therapy of the lower third of the face should be carried out to patients who had previously had BTA injections in the upper third of the face and the treatment was successful. Patients with realistic expectations, ready to understand and accept information about the possibility of developing certain undesirable phenomena that do not always affect aesthetics, but are associated with a violation in varying degrees of physiological functions.

Conclusions. Even under the condition of high patient loyalty, it is necessary to determine the appropriateness of carrying out botulinum therapy in each specific case, clarifying the genesis of this or that aesthetic problem. Patients' retention highly indicated that they were satisfied with the provided treatment by Botox injections. Improving the quality of life with least painful experience and immediate results was the major advantage for Botox type I. Botox type I is an effective conservative technique to improve gummy smile caused by muscular hyperfunction.

ANTIBIOTICS AND PROBIOTICS – FRIENDS OR ENEMIES

Kostromitskaya I. A.

Scientific supervisor: assoc. prof. Garagulya G. I.

National University of Pharmacy, Kharkiv, Ukraine

vetvir.galina@gmail.com

Introduction. The concept of biotherapy was described and proposed by I. Mechnikov. Now it is widely used to restore and correct normal microflora of the human body and animals. The intestinal microflora is important for the normal state of the macroorganism. The quantitative and qualitative composition of normal microflora can be disrupted with antibiotic therapy. This causes dysbiosis. The main way to combat dysbiosis is the use of probiotics. Scientists of different countries are engaged in the study of the effects of probiotics on the human and animal organism. Experiments on laboratory animals allow us to study the mechanism of action of probiotics, their effectiveness and to justify the order of their application.

Aim. To cause experimental dysbacteriosis in laboratory white mice with the help of the antibiotic ofloxacin. To study the influence of probiotics on the intestinal microflora of animals with artificial dysbiosis.

Determine the group sensitivity of the intestinal microflora of white mice to ten antibiotics. To study the effect of the antibiotic ofloxacin on the clinical state of mice and the sensitivity to antibiotics. To study the nature of the action of probiotics "Lactiale" and "Lactovit Forte" on the clinical state of mice and sensitivity to antibiotics of the intestinal microflora. To analyze the obtained data and to draw conclusions about the effect of probiotics on the intestinal microbiota of white mice.

Materials and methods. Microbiological methods: cultivation and light microscopy, method of clinical observation and research, biological test method, statistical method. The sensitivity to antibiotics was determined by the disc-diffusion method. The object of the study was the intestinal microflora of white mice. Subject of the study: the sensitivity of the intestinal microflora to antibiotics is normal, with experimental dysbacteriosis and with the use of probiotics. The study used materials such as microbiological nutrient media (nutrient agar and broth), the antibiotic ofloxacin, probiotics Lactiale and Lactovit Forte, paper discs with ten kinds of antibiotics (ampicillin, gentamicin, doxycycline, lincomycin, norfloxacin, ofloxacin, cefazolin, ceftriaxone, ciprofloxacin and erythromycin). The experiment lasted five weeks. In the experiment, clinically healthy white mice of 5-6 weeks of age of different sexes were used. A total of 18 mice were used (6 groups of 3 heads in each group). Group 1 is a control group, the rest are experienced. Group # 2 received the antibiotic ofloxacin, groups # 3 and # 4 received ofloxacin and the probiotic Lactiale, groups # 5 and # 6 received ofloxacin and the probiotic Lactovit Forte. All preparations were used daily for seven consecutive days. The sensitivity of the intestinal microflora to antibiotics was determined weekly. During the experiment, we collected and examined 30 samples of feces.

Results and discussion. Throughout the experiment, the control group mice remained clinically healthy. One of the female mice during the study period gave birth to healthy mice. They developed normally and were clinically healthy until the end of the study. Antibiotic sensitivity of intestinal microorganisms in mice of the first group decreased during 5 weeks of experiment from high level (26.7

mm) to low (13.2 mm). The second group of mice received ofloxacin. A sign of dysbiosis was an increase in the amount of mucus in the feces. According to our observations, ofloxacin had a side effect on mice. Their behavior became restless, agitated, fearful and aggressive. As a result, fights one mouse was injured in the abdominal wall and a day later died. Birth of mice in this group was not. Two weeks after the use of ofloxacin, the behavior of the mice was restored. The average sensitivity of intestinal bacteria in the mice of this group was high: from 22.4 to 27.9 mm. However, from the second week of the experiment among the microorganisms appeared resistant to antibiotics cocci. They formed small round colonies in the lysis zone around the discs with antibiotics. The incidence of such bacteria is 8.33-37%. Groups of mice that received ofloxacin in parallel with the probiotic "Lactiale" and "Lactovit Forte" remained clinically healthy until the end of the experiment. There were no changes in behavior. In groups # 3 and # 5, healthy viable mice were born during the experiment. The average sensitivity of the intestinal microflora under the influence of the probiotic "Lactiale" increased from 26.7mm to 30mm. Under the influence of the probiotic "Lactovit Forte" for the first four weeks the level of sensitivity to antibiotics was high (20.27-22.3 mm), and in the fifth week it decreased to (17.9 mm). The frequency of the emergence of resistant bacteria ranged from 6.25% to 41.7%. Probiotics "Lactiale" and "Lactovit Forte" neutralized the negative effect of ofloxacin on the intestinal microflora and the body of mice. The birth of healthy offspring in the two groups of mice also confirms the positive effects of probiotics.

Conclusion. The level of sensitivity of the microorganisms of the intestine of white mice was characterized by variability and depended on the effect of ofloxacin and probiotics. The use of ofloxacin led to the appearance of signs of dysbacteriosis, a decrease in the average sensitivity of intestinal bacteria from 26.7 mm to 13.2 mm and the development of side effects. Probiotics "Lactiale" and "Lactovit Forte" positively influenced the clinical state of white mice and neutralized the side effect of ofloxacin. The average sensitivity of the microorganisms of the intestine of white mice under the influence of probiotics was kept at a high level (17.9-30 mm). Selection of resistant microorganisms was recorded in all experimental groups of animals. The frequency of their appearance ranged from 6.25 to 41.7%.

FEATURES OF THE INFLUENCE OF DETERGENTS ON THE MICROFLORA OF THE HANDS SKIN

Kotyk A. V.

Scientific supervisor: assoc. prof. Tishchenko I. Yu.
National University of Pharmacy, Kharkiv, Ukraine
microbiology@nuph.edu.ua

Introduction. The microflora of the skin is represented not only by permanent (resident), but also by transitory (transient) microorganisms. Intact human skin, even carefully washed, is colonized by various microorganisms, which form a resident microflora. Its composition varies depending on the body part, age, sex, humidity, temperature, skin hygiene, and also on the time of the year. Resident microflora is important enough for immunity, it stimulates the formation of antibodies and gives the skin the resistance to colonization on it of other microorganisms, (produces free fatty acids that have bactericidal action). The presence of transient microflora is the result of skin contact with the external environment. Transitory bacteria in the skin of the hands play an important role in the transmission of infectious diseases. The transient microflora, hitting the skin, remains on the hands for no more than 24 hours and can be easily removed through normal hand washing or antiseptic treatment. Qualitative disinfection of hands is able to break the path of transmission of pathogenic microorganisms from the source of infection to a healthy person, which contributes to the prevention of intestinal and contagious infections. For cleansing the skin for many thousands of years, a tool like cute was used, and relatively recently there were liquid or solid synthetic detergents (SSD). And today the right choice of washing disinfectant and its correct using is very important.

Aim: to investigate and to compare the effects of different detergents on the skin of the microflora and to investigate the changes in skin microecology.

Materials and methods. Object and subject of study: microflora of the skin of hands and its changes under the influence of different types of soap. Methods: bacterioscopic, bacteriological, statistical.