

Results and discussion. Scientific novelty, theoretical and practical value of the work. Because of the wide spreading of helminthiasis in Ukraine, including Pervomaiskiy, the material has theoretical and practical value.

The research is based on the fact that the data of Pervomayskiy City Hospital regarding the damage to the population of Pervomayskiy by helminthiasis for the period 2013-2017 was generalized for the first time.

Conclusions. Because of the wide spreading of helminthiasis in Ukraine, including Pervomaiskiy, the material has theoretical and practical value.

Research materials are available for use on Biology lessons, educational classes and meetings devoted to infectious diseases, as well as for promoting the prevention of helminthiasis among the population of Pervomayskiy.

BOTULINUM TOXIN FOR THE TREATMENT OF GUMMY SMILE

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Introduction. Aesthetic botulinum therapy of the lower third of the face with a focus on the perioral region (a gummy smile) is gaining increasing popularity. The task of aesthetic correction is the smoothing of the skin's relief due to the relaxation of the underlying muscles, and it's not just wrinkles, but also folds of the skin, tuberosity in the chin area. Also with the help of injections of botulinum toxin it is possible to eliminate asymmetry, to correct the form of a smile. Methodical approaches to the correction of the lower third of the face are discussed in detail in the publications of leading world experts and clinical consensus. As for purely medical aspects, experts agree that botulinum therapy of the lower third of the face is associated with an increased risk of developing undesirable phenomena associated with the administration of botulinum toxin type A (BTA) to non-target muscles, uncontrolled spread of the solution or diffusion of toxin into non-target muscles, and with an overdose. Since all the muscles of the lower third of the face are involved in performing important physiological functions, the unpredictable relaxation of non-target muscles (zygomatic muscles, laughter muscles, lower lip lower muscles, muscles lifting the upper lip) or excessive relaxation of target muscles (for example, the circular muscles of the mouth) can lead to the violation of the realization of physiological functions, the expression of emotions and determine the static or dynamic asymmetry of the face.

Aim. Assessment of the impact of injections of botulinum toxin (Botox) as a conservative treatment for a sticky smile.

Materials and methods. Analysis of the scientific literature and the results of advanced research in the field of medicine and pharmacology.

Results and discussion. Experimental studies in vivo were conducted in clinics of dermatology and aesthetic medicine. The study included 53 female patients who ranged from 20 to 50 years and were treated with Botox injections due to excessive maxillary gingival display. The patients with short clinical crowns or long maxilla, those who were pregnant or breastfeeding, and patients with neuromuscular disorders were excluded. Patients received Botox type I. Evaluation of the effectiveness of the treatment was carried out using photographs and measurements of the distance from the lower edge of the upper lip to the edge of the gum before and after treatment. The amount of improvement was calculated as $(\text{pre-Botox treatment} - \text{post-Botox treatment}) / \text{pre-Botox treatment} \times 100$. The mean percentage of the total improvement was analyzed. A total of 53 female patients received treatment to improve their sticky smile. The improvement was clear 2 weeks after the injection of Botox in 99.6% of patients.

Despite the convincing results of correction of aesthetic problems of the lower third of the face with the help of botulinum, this zone is not a priority for this method due to the high risk of development of undesirable phenomena. In the lower half of the face, botulinum therapy is in many cases regarded as an auxiliary method.

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

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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