

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

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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.

Results and discussion. In the experiment we used 4 common soaps, which do not contain components with antiseptic action, such as triclosan or triclocarban (because their antimicrobial effects are already well known). We studied the influence to skin microbiocenosis of the hands of detergents: soap "Baby", toilet soap "Lipa", soap "Gospodarskoe" 72% 1 grade, natural handmade soap "Baby "(Ukraine) with natural oils and chamomile extract. Among the samples studied, only commercial soap has an antimicrobial effect. To compare the effect on the microbiocenose of a solid soap we used an antiseptic for hands "Manorm" and ethyl alcohol 96%, which also have a known antimicrobial activity.

After preparing the culture media for cultivating and taking the washings in two steps: before handling the hands and after washing them with soap or treatment with antiseptic, the hanging of the experimental material on the nutrient media was carried out and the incubation was carried out for the required time. The next step was quantitative, cultural and qualitative assessment of microbiological material.

The composition of the microbiocenosis of the hands of 6 volunteer students was studied: from each student, two washings were taken and made for 4 cups with different culture media: blood agar, mannitol salt agar, MPA, and Saburo medium. A total of 48 studies were done. In the first stage, quantitative calculation of microorganism colonies from each experimental Petri culture plate was conducted.

In the study of cultural properties, typical colonies have been identified. Quantitative and qualitative composition of the colonies is partially different before and after treatment with detergents. The number of colonies of the microflora of the skin of the hands on the nutrient medium after their hygienic treatment with soap decreases. This is confirmed by the fact that cute removes the transitory and part of the resident microflora. However, in each experimental group there were cases with an increase in the number of some colonies, or the emergence of new after hygienic treatment of hands, which can be explained by the fact that from the skin of the hands of microorganisms fall on a moist piece of soap and contaminate it.

The resident microflora was predominantly represented by coagulase-negative cocci (Staphylococcus epidermidis, St. saprophyticus), diptheroids (Corinebacterium spp.), micrococci and sarcins. The transient microflora was represented by Staphylococcus aureus, Streptococcus spp., Enterobacteriaceae, Klebsiella spp., yeast-like mushrooms.

Conclusions: 1. For hygienic purposes and frequent use it is possible to recommend the use of soap "Baby" or " Lipa ", because it does not significantly affect the normal microflora, and promotes mechanical cleansing of the skin of hands. 2. When using soap "Gospodarskoe", the number of microbes is reduced several times, therefore, with its constant application, the protective role of normal microflora decreases, which can lead to increased reproduction of pathogenic species. 3. The use of antiseptic agents leads to the destruction of the resident and transient microflora of the skin, leads to the destruction of the lipid protective layer and promotes a significant violation of the microecology of the skin, which in future may lead to the formation of pathogenic microbiota and the development of pathological processes in the body. 4. Antiseptic agents should be used in case of contamination by pathogens, for correction of microflora in diseases of the skin, in cases of lack of water, for the purpose of prevention during travel or in field conditions. 5. To prevent the contamination of lump soap with microorganisms located on the surface of the skin, it should be used as small fragments or for personal use individually.

COMPARATIVE MICROBIOLOGICAL ASSESSMENT OF CHEESE AND CHEESE PRODUCTS OF DOMESTIC AND FOREIGN PRODUCTION

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Introduction. The urgency of the theme lies in the fact that sour-milk products are of great importance in human nutrition due to their therapeutic and dietary properties, good taste and easy assimilation.

In production of sour-milk products food, flavoring and aromatic substances are used. They increase their nutritional value and the expiration date, but at the same time they can significantly affect the composition of the product and change its useful properties.