PROBLEMS AND PROSPECTS OF CREATION MEDICAL PREPARATIONS BASED ON COPYRIGHT BACTERIA

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Introduction. Spore-forming bacteria are a group of microorganisms that produce more than 200 biologically active substances.

The **aim** of the work was to analyze all existing drugs based on spore-forming bacteria and to prove the prospect of their use.

Materials and methods: analysis of scientific literature and results of advanced research in the field of microbiology and pharmacology.

Results and discussion. According to the literature, it is established that the most relevant group of spore-forming bacteria for the creation of medicines is bacteria of the genus Clostridium, Bacillus, Bravibacillus and Sporolactobacillus. These are widespread saprophytic bacteria that are antagonistic to a wide range of pathogenic and opportunistic microorganisms. These bacteria are also promising in that they are self-eliminating from the gastrointestinal tract and have anti-allergic, antitoxic (ability to bind heavy metals) and anti-inflammatory (eg, immunostimulating) action.

Analyzing the data of the existing literature, it was found that modern preparations based on spore-forming bacteria are divided into several groups: drugs for the correction of dysbiosis (probiotics); preparations for the treatment of infected wounds; preparations for the treatment of burns; preparations for the treatment of dermatitis; drugs for the treatment of mastitis; preparations for the treatment of pneumonia; preparations for the treatment of bacterial and fungal infections in animals.

For humans, most probiotics are used, other groups of drugs are used in veterinary medicine.

Currently, more than 100 drugs have been created that are partially or completely composed of sporoforming bacteria. These include: Enterozermina, biosporine (Ukraine); cerebiogen (China); Bakisubtil (France); Gloden - 8 (USA); Flonivin BS (Yugoslavia); Lactipan plus (Italy); sporobacterin, subtilis, (Russia); Bio-Vita, Miyarisan Vita, Miyarisan –FG (North Korea); and other.

Conclusions. Spore-forming bacteria stop intestinal disorders even more than probiotics. But these drugs are used less often than probiotics, and they are due to the fact that they have a generic affinity with pathogenic and toxigenic bacteria, alien to the normal gut microbiota. This area is very promising and needs more evidence-based medicine.

MICROBIOLOGICAL JUSTIFICATION OF THE USE OF BACTERIA IN THE TREATMENT OF ONCOGEN DISEASES

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Introduction. Oncogenic diseases are found worldwide and now rank second (after cardiovascular) among all diseases. The use of bacteria in the treatment of oncogenic diseases has been known since the time of the American scientist W. Coley (XIX century), who successfully introduced into the tumor a mixture of living and killed bacteria. The tumor did not grow after that, but there were many side effects. Later, radiation and chemotherapy therapy sidelined these studies. Over time, the study was continued and bacterial-based drugs appeared in the arsenal of treatment for oncogenic diseases.