THE STUDY OF SOME MODERN DOMESTIC ANTIMICROBIAL DRUGS

Kolesnik A. O., Bobrova A. N., Zhukova Y. A., Kalyuzhnaya O. S. National University of Pharmacy, Kharkiv, Ukraine bobrova_anna1996@mail.ru

Introduction. Throughout history, mankind has been fighting tirelessly with microorganisms that cause infectious diseases. Despite the fact that in recent years medicine has achieved great results in the studies and the impact on the pathogen, and is equipped with a large number of antimicrobial drugs, infection with which existing drugs fail or are not effective progress with increasing speed. Now for Pharmacology most problematic area is the search for effective and safe antimicrobial drugs, modern antimicrobials occupy a leading position in the treatment of infectious diseases. They are used in 70-100% of cases with various infectious and inflammatory diseases in patients with surgery, gynecology.

Results and discussion. Every year the world's infections killed 17 million people. This suggests that existing member antimicrobial drugs are not effective enough. Difficulties treatment of infectious pathologies and inefficiency caused by drugs:

1. Variety of forms of biological agents;

2. The constant emergence of MDR;

3. The appearance of new types of dangerous pathogens;

4. The increase of allergic reactions in the application of the majority of antimicrobial agents;

5. Having a strong toxic effect on human organs and systems.

Antimicrobial resistance (AMR), including antibiotic resistance, is the resistance of a microbe to an antimicrobial medication that used to be effective in treating or preventing an infection caused by that microbe.

The cause of antimicrobial resistant strains is that they are not controlled. It is not always justified application both in veterinary and in human medicine.

All these factors determine the need for constant monitoring of existing medicines and the creation of new ones with improved pharmacokinetic properties and to reduce the toxicity.

Conclusion. Based on these data, research in order to study the stability of various microorganisms to antibacterial drugs of Ukrainian origin are conducted at the Department of Biotechnology.