

PROBLEMS OVERCOME ANTIBIOTIKO-RESISTANCE

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Antibiotic resistance has always existed. The problem of antibiotic resistance among clinically important microorganisms is rooted in complex ecological and evolutionary relationships between organisms themselves, formed long before the human species. Resistant strains occur when the genome of a bacterial cell as a result of spontaneous mutation, with the participation of the plasmids. Resistance genes may fall into the bacteria by bacteriophages or captured by microbes in the environment.

Selection of antibiotic-resistant strains has been accelerated unwise prescribing - mistakes in the choice of antibacterial drug, the dosage, the duration of antibiotic therapy ill, the massive spread of self-medication. Played a large role in the total implementation of antibiotics ecosphere. This led to a sharp change in the phenotype, and in many cases - and the genotype of pathogens that cause the most widespread human infection. There has been a quantum leap in the evolution of a microcosm, this has led to the emergence of new, unknown pathogens present. Has not yet established an antibiotic effective against all pathogenic bacteria.

Ways to overcome antibiotic resistance among microorganisms:

1. World Organization of Health Care strategy to contain antimicrobial resistance (control, education).
2. Combined treatment with antibiotics. It is necessary to consider the nature of their interaction - is unacceptable to apply a combination of antibiotics, which mutually destroy each other's activity (antagonism of antibiotics). This improves the effectiveness of antibiotic therapy, to avoid complications and reduce the appearance of the adaptive properties of microorganisms.
3. Rotation of antibiotics. Alternation and change of antibiotics according to their chemical and pharmaceutical properties and mode of action reduces the selective pressure on microorganisms and prevents the formation of antibiotic resistance.
4. The development of antibiotics, specifically acting on pathogens or tropic to various organs and systems of the human body.

Antibiotic resistance - a global problem. Only simultaneous action to curb the growth of antibiotic-resistance in each country will be able to produce positive results in the world.