

THE ROLE OF ANTIBIOTIC THERAPY IN THE PATIENTS AND NOSIONS SANITATION DIFTERIAL INFECTION

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Introduction and aim. Diphtheria is a severe infectious disease with high mortality, which occurs today against the background of vaccine prophylaxis. The ability of corynebacteria to produce a toxin is a major symptom of their pathogenicity, therefore, the pathogens are toxicogenic strains of *Corynebacterium diphtheria*. But the use for the prevention of toxoid does not always prevent the development of the disease and does not affect the persistence of the pathogen. To treat patients with toxigenic forms of diphtheria, the antitoxic serum is used primarily, and antibiotic therapy is of secondary importance. In our time, the rehabilitation of carriers of non-toxicogenic diphtheria strains is relevant and antibiotic therapy is the first place. According to the protocol for the treatment of diphtheria infection, the Ministry of Health of Ukraine recommends certain groups of drugs, especially the penicillin number. Given the variability of microorganisms under the influence of many environmental factors (in modern conditions, primarily under the influence of electromagnetic radiation), the antibiotic resistance of nontoxicogen strains of *Corynebacterium diphtheria*, mitis and gravis, were isolated from bacterial carriers to different classes of antibacterial drugs.

Materials and methods. Determination of the susceptibility of the studied microorganisms to the antimicrobial drugs was carried out using a disk diffusion method on the Muller-Hinton medium using commercial disks with benzylpenicillin, ampicillin, rifampicin, cefalexin, ofloxacin, levofloxacin, gatifloxacinum, cefalotinum, erythromycin, gentamycin by the NICP (St. Petersburg) standard methodology.

Results and conclusions. Studies have shown that 92% of the examined strains were insensitive to benzylpenicillin, while according to the protocol for treatment of patients and bacterial carriers of diphtheria infection approved by the Ministry of Health of Ukraine, this drug is recommended for use and is effective in the past years. Most strains (up to 70%) showed resistance to cefalexin and erythromycin, and moderate sensitivity to other antibiotics (rifampicin, gentamicin, ofloxacin, cefalotin, amikacin). All strains examined were sensitive to gatifloxacin and levofloxacin.

Conclusion. Thus, among the circulating pathogens of diphtheria are found strains that have 100% sensitivity to new generation drugs, and are resistant to those used for a long time.

APPLICATION OF ANTIBIOTICS IN THE NATIONAL ECONOMY AND ITS DANGER TO HUMANS (REVIEW)

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Introduction. In the modern world, antibacterial drugs are often used in crop production and animal husbandry, because of what it gets into finished products. This poses a great danger to people who eat meat, eggs, etc., which even WHO mentions.

Aim. Systematization of data on the problem of the application of antibiotics in the national economy.

Antibacterial drugs are actively used not only in medicine to treat humans, but also in livestock to accelerate the growth of livestock and poultry and prevent diseases. As a result, they remain in the muscle mass (meat), get into milk and eggs. For the same purposes, antibiotics are used in fish farming and plant growing. Also, unscrupulous manufacturers use antibiotics to treat seafood, fruits and vegetables to transport them for long distances and to store longer.