ANTIMICROBIAL ACTIVITY OF NEW ANTIBACTERIAL MEDICINAL PRODUCT CONTAINING CEFTIOFUR AND KETOPROFEN AND ITS EFFICACY IN TREATMENT OF RESPIRATORY DISEASES IN PIGS

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Today the medicinal products of cephalosporin range that contains antibiotic of the third generation of cephalosporins ceftiofur are used aiming at etiotropic therapy of respiratory diseases in pigs.

In the sphere of veterinary medicine the role of non-steroid anti-inflammatory products has increased that possess expressed anti-inflammatory, analgesic and antipyretic effect without any side effects.

The article presents the data about the test of microorganism sensitivity, causal agents of respiratory diseases in pigs to new combined antimicrobial medicinal product Procefen 100 (suspension for injections) the active substances of which are ceftiofur and non-steroid anti-inflammatory substance ketoprofen and the efficacy of medicinal product in treatment of infections of bacterial etiology in piglets was studied.

The results of bacterial tests of biological material samples taken from sick piglets detected the microorganisms by tinctorial and cultural-biochemical peculiarities that belonged to species Staphylococcus aureus, Bordetella bronchiseptica, Escherichia coli.

Under the conditions of the determination of minimal inhibitory concentration of ceftiofur all cultures Staphylococcus aureus appeared to be sensitive to the very medicinal product (MIC was equal to 1,6 0,8 µg/ml) and the isolates of Escherichia coli appeared to be resistant (MIC was equal to 25 6,2 µg/ml). According to the level of bacteriostatic activity of ceftiofur the highest level of sensitivity was observed in the isolates Bordetella bronchiseptica (MIC was equal to 0,2-0,4 µg/ml).

The therapeutic efficacy of the medicinal product Procefen 100 in manufacturing experiment using piglets confirmed the obtained data about its antibacterial activity concerning microorganisms-causal agents of respiratory diseases in pigs.

**Keywords:** CEFTIOFUR, KETOPROFEN, RESPIRATORY DISEASES, SWINE, ANTIMICROBIAL ACTIVITY, THERAPEUTIC EFFICIENCY.