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**The effect of Enrofloxacin and Ciprofloxacin on blood viscosity of ducks**

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Fluoroquinolones are a group of dynamically developing synthetic antibacterial agents that are linked by a common mechanism of action, which consists in suppressing the key enzyme of a bacterial cell. The specificity of the mechanism of action determines the absence of cross-resistance to them in bacteria with antimicrobial agents of other chemical structures and de-

termines their role in treatment of infections caused by resistant strains. A significant feature of fluoroquinolones is their pharmacokinetics, thanks to which a high degree of bioavailability is achieved in cases of their internal use. As a result of fluoroquinolones application in some cases there are some weakly expressed changes manifested in the form of anemia, thrombocytopenia, eosinophilia, increased erythrocyte sedimentation rate, leukocytopenia or leukocytosis. These adverse reactions raise the question of the influence of fluoroquinolones on the blood system. Studies of the influence of fluoroquinolones on blood viscosity parameters in chickens have shown that the use of Norfloxacin and Moxifloxacin does not significantly affect blood viscosity, without violating the physical and chemical properties of the internal environment of the body. In connection with the above mentioned purpose of work was to study the influence of Enrofloxacin and Ciprofloxacin on blood viscosity of ducks.

Three groups of daily ducklings were formed to achieve the goal: control, experiment 1 and experiment 2. During ten days the ducklings of the experimental groups were fed with Enrofloxacin and Ciprofloxacin in a dose of 200 mg/l water respectively. The selection of blood for analysis carried out on the first, third, fifth, seventh and ninth day after the withdrawal of drugs. Blood obtained by intracardiac puncture was stabilized with sodium citrate. Blood viscosity was determined using a VK-4 viscometer.

As a result of the research it was found out that blood viscosity of the control group ducklings during the experiment was in the range from 3.27 to 3.55 Pa-s. These values were taken as normal. Blood viscosity of the ducks receiving Enrofloxacin ranged from 3.18 to 3.75 Pa-s. Statistically reliable increase of the index was recorded on the first day after the drug withdrawal. Evaporation of Ciprofloxacin led to certain changes in blood viscosity indexes. On the third day after the drug withdrawal the blood viscosity of chickens significantly decreased by 6%, on the seventh day - increased by 8% compared to the control. By the end of the experiment, blood viscosity values returned to normal values.

Thus, it was found that the use of Enrofloxacin and Ciprofloxacin as a whole does not cause significant changes in blood viscosity values and does not violate the physical and chemical properties of the internal environment of the ducks.