

The effect of furazidone on the parameters of the leukocyte formula of chickens.

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INTRODUCTION & AIM

Global consumption of chicken meat is constantly growing, because poultry meat is an inexpensive and valuable source of protein. However, poultry meat consumers are concerned about the uncontrolled use of antimicrobials in agriculture. Based on the literature data, in 2010 the total use of antibiotics in animal husbandry was $63,151 \pm 1,560$ tons, and by 2030 it is projected to increase by 67%.

[1]

Antimicrobials that accumulate residually in meat and organs of poultry can pose two main dangers: the development of antibiotic resistance in humans when consuming such products, as well as some toxicological effects.

The aim of the work was to study the antibiotic furazidone on the parameters of the leukocyte formula in birds.

METHOD

To study the effect of furazidone on poultry blood, groups of day-old Hysex Brown chickens were preliminarily formed. The next stage of the work was the milking of chickens with the drug "Furazidone" at a dosage of 200 mg / l. According to the results of blood sampling on the 1st, 3rd, 5th, 7th, 9th days, the blood parameters of chickens were evaluated using standard methods of microscopy of a poultry blood smear followed by calculation of the leukocyte formula.

RESULTS & DISCUSSION

According to the results of the study, it turned out that the most pronounced changes were observed in the number of pseudoeosinophils – on the 1st and 3rd days after discontinuation of the drug, the number of pseudoeosinophils increased by 8.9%, on the 5th day - 5.9%. On the 7th day after discontinuation of the drug, the increase in the number of pseudoeosinophils was 5%. On the 9th day, this indicator returned to the control values.

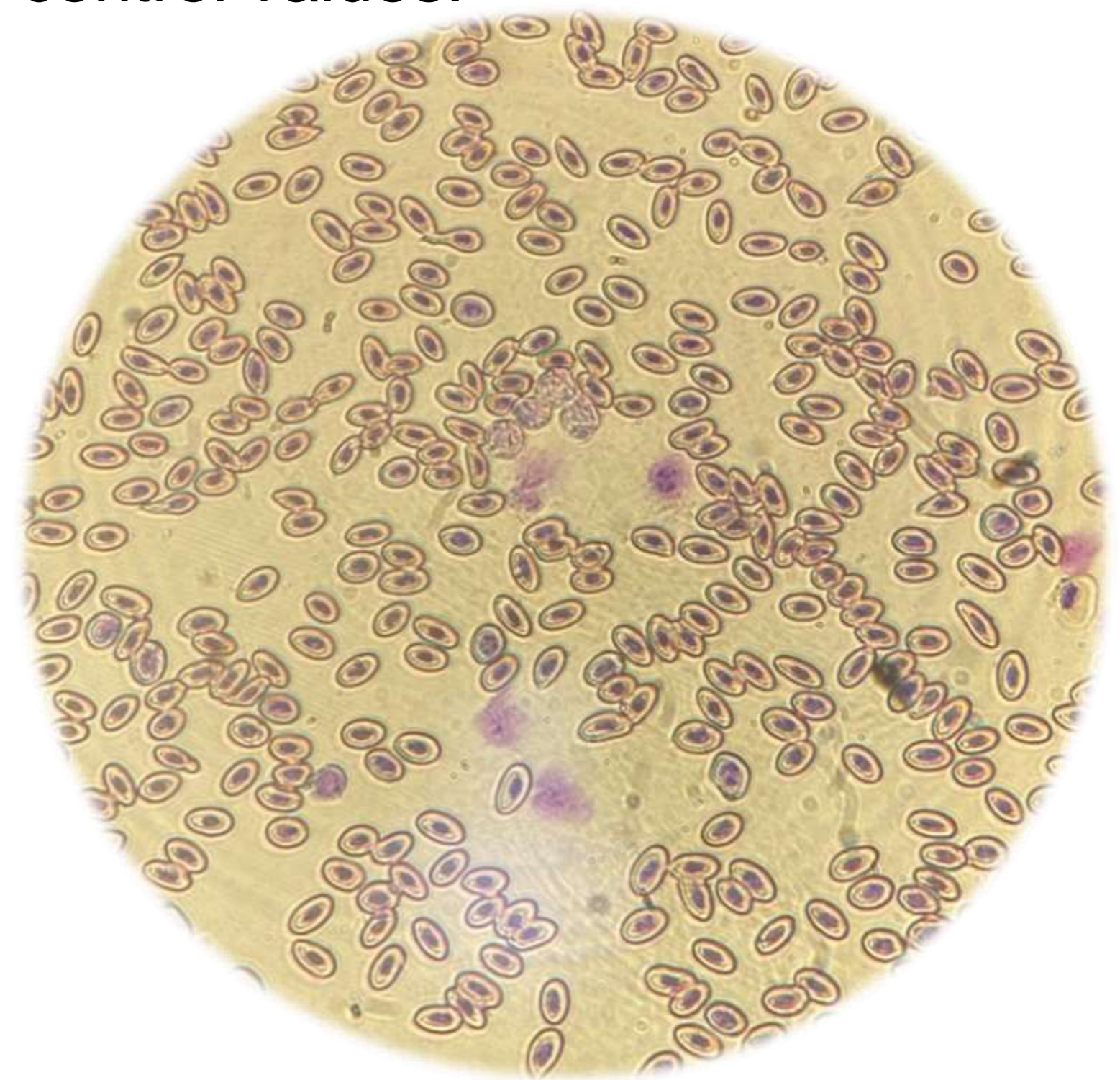


Figure 1. Microscopy of a blood smear of a Haysex Brown cross poultry.

CONCLUSION

According to the values obtained during the experiment, it turned out that the parameters of the leukocyte formula do not undergo significant changes under the action of furazidone.

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FUTURE WORK / REFERENCES

In the future, it is planned to study the effect of furazidone on other hematological parameters of chicken blood.

References:

[1] Van Boeckel T. P. et al. Global trends in antimicrobial use in food animals // Proceedings of the National Academy of Sciences. 2015. T. 112. №.18.C. 5649-5654.