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# ESTROPHANE SOME MORPHOGENESIS OF COW BLOOD

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| ABSTRACT | KEYWORDS |
| --- | --- |
| The article describes the dynamics of changes in the shape elements of the composition of the blood of cows as a result of the pharmacokinetic and pharmacodynamic effects of the hormonal drug estrophan based on the analysis of the literature. | Estrofan, hemoglobin, erythrocyte, cyanide method, lekotsid. |

**Relevance of the Topic**

Our government assigns urgent tasks to veterinary science and practice, such as personal assistants, the development of effective and cost-effective methods of introducing new modern drugs used in the fight against and treatment of diseases of farm livestock, and achieving a reduction in the cost of products through their implementation. folded Hormonal drugs with various pharmacological effects have been introduced and used in animal husbandry and veterinary practice in recent months for the treatment and prevention of infertility of farm animals and various diseases of the female reproductive system. Currently, many new hormonal preparations produced abroad and produced in our domestic pharmaceutical enterprises are entering the veterinary practice of our Republic, including surfagon, estrophan, klotoprostin and others. In addition to their widespread use in practice, there is no literature information about the mechanism of action, pharmacological properties.

It has been determined that sheep in different natural conditions show specific dynamics of changes in blood serum albumin in the physiological stages of postnatal ontogeny in connection with living conditions. The author's experiments proved that the blood of animals is different at different ages and living conditions, and conclusions were drawn. In the literature, there are scientific materials that have been proven in experiments that the animal's living conditions are different in the postnatal ontogenesis of the organism.

It has been found that sheep in different natural conditions exhibit specific dynamics of changes in serum triglycerine in the physiological stages of postnatal ontogeny in relation to living conditions. Changes in sheep blood were mostly reversible at 6 months and 60 months of posnotol ontogenesis

**The purpose of the study**. The purpose of our scientific research is to study the laws of effects of strophan drug, which affects the uterus, on blood parameters of cows.

**Object and methods of testing** Our experiments were conducted on cows at a livestock farm specializing in breeding in Fergana district, Fergana region. The number of erythrocytes and leukocytes (on the Goryaev counting grid), hemoglobin (hemoglobin-cyanide method) of blood samples taken from cows. Experiments were carried out on 5-6 year old cows divided into 3 groups. Cows in group 1 were given 0.5 mg/kg of estrophan, cows in group 2 were given 3 mg/kg, and cows in group 3 were given 10 mg/kg intramuscularly, and the effect of the drug on the morphological indicators of cows' blood was studied.

**Inspection results.** Before starting experiments, experimental animals were monitored for clinical signs for 16 days. All animals in the experimental group had their blood counts checked before drug administration, and at the same time, they were considered as the control group. The experimental animals were under control for 20 days. When Estrofan was administered three times at a dose of 0.5 mg/kg (the first experimental group), significant changes in the blood parameters of cows during the entire experimental period, including the number of erythrocytes (1.90 ± 2.03%), the number of leukocytes (2.60 ± 3.08%) and hemoglobin content (2.14 ± 3.76%) did not change.

Estrophane at a dose of 3 mg/kg three times (experimental group two) produced significant and legitimate changes in the level of blood parameters in cows. Compared to the initial indicator, the number of erythrocytes decreased from 2.25 to 7.50% by 3, 6, 12 and 24 hours, as well as by the 3rd day of the study, that is, three days after the last administration of the drug. The greatest decrease in their number occurred in the 3rd hour of the experiment (respectively 7.51; 6.50 and 5.27%), later (from 6th day) and at the end of the experiments, compared to the initial indicators, 3, Observing that it increased by 76%.

The amount of possible Hemoglobin also decreased to 2.96-10.80% during these periods of research, but it was noted that it increased to 3.93% by the last days of the experiment (day 15). The maximum decrease in the amount of hemoglobins was observed in the first 3 and 6 hours of the experiment, that is, this amount was proportionally 10.81; 7.87; 6.89; and corresponded to 5.90%. The number of leukocytes increased by 2.15-6.70% on the 1st day of the experiment, the maximum changes were observed after 6.14 and 24 hours and returned to the previous state at the end of the experiment.

After 3 doses of 10 mg/kg of Estrofan (the third experimental group), the most significant changes were observed in the quantitative index of blood-forming elements. At the end of the experiment, a significant decrease in the number of erythrocytes and the amount of hemoglobin and a significant increase in the number of leukocytes were found, that is, the number of erythrocytes decreased by 14.48-20.15%, the amount of hemoglobin decreased by 16.1-22.66%, and the number of leukocytes increased It was equal to 9.25-19.31% (R 0.02). When used in the lowest and medium doses (i.e. 1-3 mg/kg), it was noted that the blood parameters of animals changed in almost the same direction, but at different levels.

When using a high dose of estrophan (10 mg/kg), significant changes in blood parameters were detected, including a significant decrease in the number of erythrocytes and the quantitative percentage of hemoglobin, while the number of leukocytes, on the contrary, increased. So, the drug estrophan has a significant effect on the morphological parameters of the blood of animals at maximum doses.

**Conclusions**

1. Estrofan in small doses (1 mg/kg) has almost no effect on the morphological parameters of the blood of cows (number of erythrocytes and leukocytes, amount of hemoglobin).
2. Estrofan in medium doses (3 mg/kg) partially affects the morphological parameters of the blood of cows (the number of erythrocytes and leukocytes, the amount of hemoglobin).
3. Estrofan in large doses (10 mg/kg) has a toxic-toxic effect on the morphological parameters of the blood of cows (the number of erythrocytes and leukocytes, the amount of hemoglobin).

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