MORPHOLOGICAL INDICATIONS OF BLOOD WHEN ADMINISTERING MULTIVIT+MINERAL AND BODIFORS PREPARATION TO RABBITS.

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Abstract

In this article, when examining the blood of rabbits that received 0.5 ml of the drug "Multivit+Minerallar" intramuscularly per rabbit, and 0.1 ml of the drug "BODIFORS" administered intramuscularly to each rabbit, the number of erythrocytes was 59.2% g, the hemoglobin content was 15.4%, and the erythrocyte sedimentation rate was 108%. increased, the number of leukocytes decreased by 13.9% and hematocrit decreased by 1.3%, and the amount of erythrocytes increased by 22%, the number of leukocytes increased by 7%, the concentration of hemoglobin decreased by 15.2%, and the rate of erythrocyte sedimentation rate increased by 20.7%. and the hematocrit percentage decreased by 5.2% done

Keywords: Multivit+Minerals", "BODIFORS", SAT-COM, Selenoline, erythrocyte, hemoglobin, erythrocyte sedimentation rate, leukocyte, hematocrit percentage, stimulants, immunomodulators, adaptogens, vitamins, antioxidants and anabolics.

Relevance of the topic. The decisive factor in increasing the intensity of animal meat production on an industrial basis should be the provision of complete feed that meets all the physiological needs of the body, depending on the age, physiological condition, level of productivity and direction of the animals. However, as a rule, in large livestock complexes, the feed ration is not sufficiently balanced or nutrients are not fully absorbed. Therefore, it is recommended to additionally use metabolic stimulants and anti-stress drugs, adding them directly to the feed or using them in the form of injections. With the right choice of drugs, the

animal's body better absorbs the nutrients supplied with the feed, metabolism improves, and as a result, productivity increases.

Many researchers (Salomatin V.V., 2004; Bykov V.A., 2006; Surkov A.A., 2007; Shperov A.S., 2009; Zhirkova T.D., 2009; Ilchugulov A.B., 2010; Kukushkin I.Yu., 2011) have studied the issues of increasing and improving the quality of livestock products with the help of growth-stimulating, anti-stress, adaptogenic drugs, minerals, amino acids and enzyme preparations in the form of injections or feed additives.

The practical use of SAT-COM and Selenoline drugs has yielded positive results. Studies have been conducted to study these drugs and their effects on the animal body, and it has been proven that these drugs are powerful stimulants of metabolic processes. In this regard, the joint introduction of Canadian breeds into the body of hybrid pigs, which are bred and kept in a large industrial complex for pig farming, is of great scientific and practical interest.

Currently, it is promising to study the possibilities of using preparations containing humic substances to increase the productivity of animals (Berkovich A.M., 2003; Meshcheryakov N.P., 2004). They are high molecular compounds that are formed during the decomposition of plant lignin in soils, peats and coals (Dobryakov Yu.I., 1996). These compounds are biologically active and have antioxidant, immunostimulating, adaptogenic and detoxifying properties (Buzlama S.B., 2008, etc.).

Means for increasing animal productivity include growth stimulants, immunomodulators, adaptogens, vitamins, antioxidants and other drugs that have an anabolic effect, normalize metabolism and increase the general nonspecific resistance of the body (Ryadnov A.A., 2012; Kravchenko Yu.V., 2012 and others).

In this regard, the study of adaptogens and immunomodulators that stimulate the general resistance of the body, increase growth rates, improve productivity and the quality of the resulting products is considered relevant. When selecting such products, our attention was paid to the natural growth stimulant Bodiforce, which is used in the form of injections.

In this regard, our study aimed to study the effect of the stress corrector adaptogen multivit+mineral and the growth stimulant Bodiforce on the physiological state of obesity and productivity performance indicators in rabbits, as well as on the body.

The purpose of the study. In our study, the effect of the stress corrector adaptogen multivit + mineral and the growth stimulant Bodiforce on the physiological state of obesity in rabbits and indicators of productivity and efficiency, as well as on the body, when used separately and in combination.

Research location, objects and methods. The experimental part of the study was conducted at the Nukus branch of the Samarkand University of Veterinary Medicine, Animal Husbandry and Biotechnology, 31 A. Utepov Street, Nukus city, Republic of Karakalpakstan. The study was conducted on 20 rabbits in 3 experimental and 1 control groups, and rabbits from 5 heads were selected for each experimental group. Each group was kept in separate cages. Clinical examinations of experimental rabbits were carried out at the beginning, middle and end of the experiment. The rabbits were clinically examined using generally accepted clinical examination methods to determine the general condition, appetite, level of obesity, reaction to external influences, mucous membranes, skin, skin and musculoskeletal condition, body temperature, pulse and respiratory rate per minute. Rabbits in all groups were weighed on an empty stomach on an electronic scale 6 times during the experiment at the same time in the morning. The rabbits in the first experimental group were administered 0.5 ml of the "Multivit + Minerals" preparation produced by the German company "Imm Cont" intramuscularly to each rabbit. On the 14th day of the experiment, the same dose was administered again. The rabbits in the second experimental group were administered both the "Multivit + Minerals" preparation produced by the German company "Imm Cont" and the "BODIFORCE" preparation produced by the Toshbolta Ota company intramuscularly. Each rabbit was given 0.5 ml of the drug "Multivit + Minerals" intramuscularly, and each rabbit was given 0.1 ml of the drug "BODIFORCE" intramuscularly. The same dose was administered again on the 14th day of the experiment. The rabbits in the third experimental group were given 0.1 ml of the drug "BODIFORCE" manufactured by the "Tashbolta Ota" company intramuscularly. The same dose was administered again on the 14th day of the experiment. The rabbits in the fourth control group were not given any drug. All rabbits in the experimental group were kept in the same conditions and fed the same food. The rabbits in all groups were examined for clinical indicators (body temperature, heart rate, respiratory rate) and morphological blood parameters before and during the experiment.

Analysis of the results obtained. In addition to clinical physiological indicators, all rabbits in the experiment were also examined for morphological indicators of their blood before the experiment and on the 5th, 10th, 20th and 36th days of the experiment. Analysis of the data obtained showed that the number of erythrocytes in the blood of rabbits in the first group, which received 0.5 ml of the drug "Multivit + Minerals" intramuscularly per rabbit, increased by 3.2% on the 5th day of the experiment and decreased by 3.6% by the end of the experiment compared to the initial indicators.

The number of leukocytes in the blood of rabbits in this group increased by 16.6% on the 5th day of the experiment and by 39.5% at the end of the experiment. The change in hemoglobin

content was similar to the change in the number of erythrocytes, decreasing by 25.2% on the 5th day of the experiment and by 24.7% on the 10th day of the experiment, and then, on the 30th day of the tests, its amount decreased by 19.0%. In rabbits of the first experimental group, the erythrocyte sedimentation rate decreased by 6.7% on the 5th day compared to the beginning of the experiment, by 3.4% on the 10th day of the experiment, and at the end of the experiment it was equal to the initial indicators. It was found that the percentage of hematocrit in this group decreased during the experiment and decreased by 2.2% on the 10th day of the experiment and by 7% at the end of the experiment compared to the initial indicators.

When examining the blood of the second group of rabbits in the experiment, where 0.5 ml of "Multivit+Minerallar" drug was administered intramuscularly to each rabbit, and 0.1 ml of "BODIFORS" drug was administered intramuscularly to each rabbit, the following changes were noted.

The number of erythrocytes increased by 16.7% on the 5th day, 18.2% on the 10th day, and 59.2% on the 36th day of the experiment.

The number of leukocytes began to decrease from the beginning of the experiment and decreased by 25% on the 5th day, 24.1% on the 10th day and 13.9% decrease compared to the initial values at the end of the experiment. The hemoglobin content decreased by 4.1% and 1.2%, respectively, compared to the initial values on the 5th and 10th days of the study, while on the 20th day of the experiment it increased by 5.5% compared to the initial values and by 15.4% compared to the initial values at the end of the experiment. In rabbits of the second experimental group, the erythrocyte sedimentation rate increased by 16.6%, 28% and 108%, respectively, compared to the initial values on the 5th, 10th and 36th days of the experiment. The hematocrit percentage in this group decreased during the experiment and decreased by 4.1% on the 10th day of the experiment and by 1.3% compared to the initial values at the end of the experiment.

It was noted that the amount of erythrocytes in the blood of rabbits in the third experimental group, where 0.1 ml of "BODIFORS" drug was administered intramuscularly to each rabbit, increased by 6.2% on the 5th day of treatment and 12.4% on the 10th day, and increased by 22% at the end of the experiment. The number of leukocytes increased during the experiment, an increase of 1.7% compared to the initial values was observed on the 5th day of treatment and 3.1% on the 10th day, and an increase of 7% was detected at the end of the experiment. Hemoglobin concentration increased by 7.4% on the 5th day of the experiment and by 9.9% on the 10th day. By the end of the experiment, its amount began to increase again and it was shown that it increased by 15.2% compared to the initial values.

The erythrocyte sedimentation rate in the blood of rabbits in the third experimental group increased during the experiment and was recorded as an increase of 25.5% on the 5th day of

the experiment compared to the beginning of the experiment, 24.1% on the 10th day of the experiment and 20.7% at the end of the experiment compared to the initial values.

Similarly, the hematocrit percentage increased slightly during the experiment, increasing by 2.2% on the 10th day of the experiment and 5.2% at the end of the experiment compared to the initial values.

The number of erythrocytes in the blood of rabbits in the fourth control group was recorded as an increase of 7.8% on the 5th day of treatment and 5.6% on the 10th day of the experiment and 2.2% at the end of the experiment. The number of leukocytes increased during the experiment, on the 5th day of the treatment it decreased by 1.6% and on the 10th day by 4.2%, and at the end of the experiment it was observed that it decreased by 23.3%. Hemoglobin concentration increased by 6.2% on the 5th day of the experiment and by 8.2% on the 10th day, and by the end of the experiment, its amount decreased by 11.9% compared to the initial values.

The erythrocyte sedimentation rate in the blood of rabbits of this group decreased during the experiment, and it was noted that it decreased by 13.2% on the 5th day of the experiment, by 15.8% on the 10th day of the experiment, and by 23.7% at the end of the experiment compared to the initial values.

It was found that the hematocrit percentage increased slightly during the experiment, increasing by 2.3% on the 10th day of the experiment and by 12.7% at the end of the experiment compared to the initial indicators.

From the results obtained from the experiments, it can be concluded that during the examination, the experimental species

Summary

1. When examining the blood of the second group of rabbits in the experiment, where 0.5 ml of "Multivit+ Minerallar" drug was administered intramuscularly to each rabbit, and 0.1 ml of "BODIFORS" drug was administered intramuscularly to each rabbit, the number of erythrocytes increased by 59.2%, the amount of hemoglobin by 15.4%, and the rate of erythrocyte sedimentation by 108%. it was determined that the number of leukocytes decreased by 13.9% and the percentage of hematocrit decreased by 1.3%.
2. It was noted that the amount of erythrocytes in the blood of rabbits in the third experimental group, which received 0.1 ml of "BODIFORS" drug intramuscularly per rabbit, increased by 22%, the number of leukocytes at the end by 7%, hemoglobin concentration by 15.2%, the rate of erythrocyte sedimentation by 20.7%, and the percentage of hematocrit decreased by 5.2%.

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