



Clinical and Hemotological Indications on the Fifth Day of the Treatment of Sheep with Coenurosis After Surgery

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Abstract: This article provides brief information about the clinical and hematological parameters of sheep with senurosis on the fifth day after surgery. Experiments were conducted on 17 sheep suffering from senurosis. After the operation, blood samples were taken from each sheep on the 5th day of treatment, blood analyzes were performed, and the obtained results were statistically processed.

Keywords: Senurosis, morphology, hemoglobin, erythrocyte, leukocyte, erythrocyte sedimentation rate (ECHT), ALT, AST, bilirubin, cholesterol.

Introduction. Senurosis is found in many countries of the world and brings great economic damage to sheep farms. Senurosis is a fatal disease caused by the larval stage of *Taenia multiceps*, which causes great economic losses in sheep farms[6.8].

Main part: Researchers have studied various indicators of the blood of sheep with senurosis and the following conclusions have been drawn.

Blood eosinophilia is often observed in allergic diseases, worm diseases (fasciolosis, echinococcosis, finnosis, coccidiosis, etc.)[7].

In sheep, the interpretation of the hematological profile together with the history, clinical findings and other diagnostic tests provides valuable information for the final diagnosis of the disease. Examination of stained blood films is an important part of sheep hematological examination, providing information on cell morphology, presence of hemoparasites and accuracy of automated cell counts. The results of biochemical analysis of the blood of goats with rare muscular senurosis did not differ from the biochemical indicators of healthy goats [2].

Haematobiochemical results revealed leukocytosis with mild eosinophilia, which may indicate parasitic infection, but no significant change in red blood cell count was observed in affected sheep. In addition, the protein profile and serum concentration of fibrinogen were found to be within the normal range[4].

When the blood of sheep suffering from senurosis was examined and the complete morphological and biochemical indicators of the blood were not changed, it was found that there were no changes [3].

When diagnosing some parasitic diseases, for example, an increase in the percentage of blood eosinophils during trichostrongylid infections, or an increase in the concentration of aspartate aminotransferase or -glutamyltransferase in the blood of enzymes, such as trematode infections, is observed. These approaches have limitations, the most important of which is that these methods can only indirectly diagnose the presence of parasites[1].

In senurosis, segmented neutrophils increased by 35.8%, cholesterol by 3.0%, erythrocyte sedimentation rate slowed by 2.7 mm/s, hemoglobin by 1.4%, erythrocytes 33.1%, eosinophils decreased by 30.0%, AST decreased by 64.1%[5].

By determining the morphobiochemical indicators of the blood of sheep suffering from senurosis, it is possible to determine the processes taking place in the body.

Material and methods. During 2021-2022, the research was conducted in the surgical clinic of the "Veterinary Surgery and Obstetrics" department of the Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology.



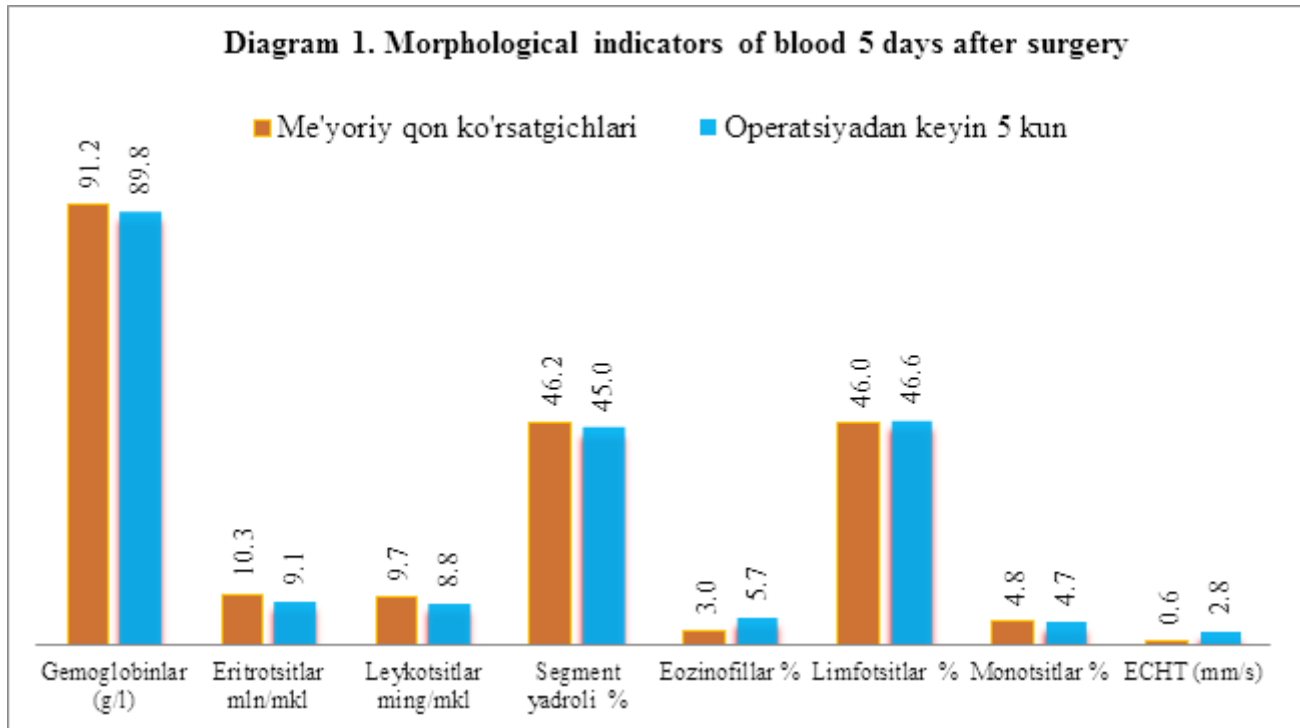
Figure 1. Blood sampling process



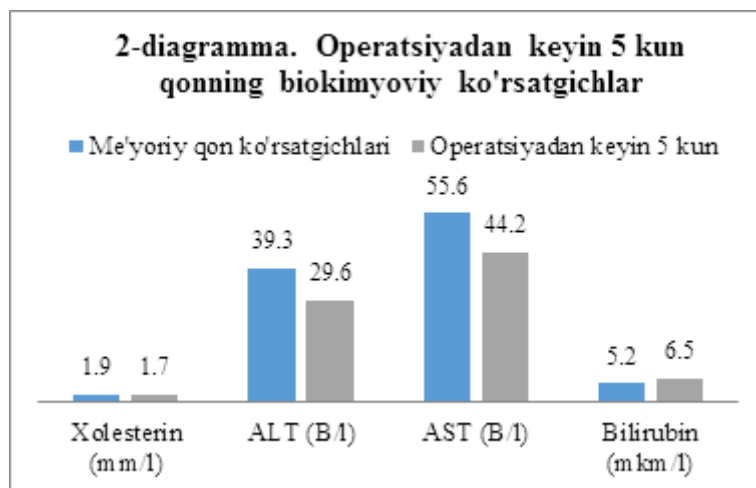
Figure 2. Laboratory testing process

conducted in 17 infected sheep. Sheep suffering from senurosis were operated on at different times, and blood samples were taken and analyzed on the 5th, 10th, and 15th days from that day. In this article, only the results of the blood analysis 5 days after the operation are given. To compare the obtained results, blood was taken from 17 healthy sheep and experimental sheep were compared with these results. Clinical, morphological and biochemical examination of blood, biometric and statistical processing methods were used in the research. In this case, the number of erythrocytes and leukocytes in the blood was counted on the Goryaev counting grid, biochemical indicators of blood were checked by kinetic methods on the CYANSmart CY009 spectrophotometer.

Research results and their analysis. Physiological indicators were determined before taking blood samples from sheep with surgical removal of the bladder. It was observed that the heartbeat was 85-95 times per minute, the number of respirations was 16-30, and the body temperature was 38.5-39.5 C°.



Blood samples were taken in the morning before feeding the animals, 5 ml of blood with heparin in the amount of 1 ml /0.1 mg (Fig. 1) and were examined on the same day in the "Samarkand Diagnostic" clinical laboratory. On the 5th day after the operation, the total blood parameters of the experimental sheep with senurosis showed a decrease of hemoglobin 89.8 ± 2.2 g/l by 1.5%, erythrocytes 9.0 ± 0.1 million/ μ l, me that the amount of leukocytes decreased by 9.3% compared to the norm of 8.8 ± 0.1 thousand/ μ l, thrombocytes, monocytes, segmented neutrophils, lymphocytes were normal; eosinophils increased by 90.0% compared to the norm of $5.7 \pm 0.3\%$; ECHT was found to be slowed down by 2.8 mm/s compared to the norm of 2.8 ± 0.2 mm/s (diagram 1).



The analysis of biochemical blood parameters showed that Cholesterol (CHOL) was 1.7 ± 0.1 mmol/l, 10.5% compared to the norm, ALT (alanine aminotransferase) was 29.6 ± 1.6 B/l, compared to the norm. by 24.7%, AST (aspartate aminotransferase) decreased by 20.5% compared to the norm of 44.2 ± 1.4 B/l, Total bilirubin (TB) decreased by 6.5 ± 0.2 μ m/l compared to the norm It was found to increase by 25.0%, $p \leq 0.01$ (Chart 2).

CONCLUSION

The results of the blood analysis of the sheep with senurosis, obtained on the 5th day after the operation, showed that hemoglobin decreased by 1.5%, erythrocytes decreased by 11.7%, eosinophils increased by 90.0%, segmented neutrophils, platelets, monocytes, and lymphocytes it was found to be in the yard. it was found that the rate of erythrocyte sedimentation slowed down by

2.8 mm/s. It was found that cholesterol decreased by 10.5%, ALT by 24.7%, AST by 20.5%, and total bilirubin increased by 20.5%.

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