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Clinical Symptoms of Lamb Streptococcosis and their Pathologoanatomic Changes

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A B S T R A C T
This article presents the prevalence, clinical signs, pathologoanatomical changes of streptococcal disease among sheep.

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Materials: Livestock and peasant farms are one of the leading industries in our republic. In fact, the demand of our people for livestock products is increasing day by day. Because infectious diseases cause huge economic damage in livestock development. Infectious bacterial diseases have a high mortality rate, a high rate of infection in a short period of time, and the cost of prevention and control. The development of theoretical foundations and preventive measures for the provision of livestock products is one of the tasks facing the veterinary field today. The productivity of livestock depends on their health.

Streptococcus is an infectious bacterial disease of young animals, which is manifested by septicemia in acute cases, and in chronic cases - mainly by injuries to the lungs, joints, and gastrointestinal tract. In adult animals, endometritis and mastitis are observed. The disease is recorded in almost all countries of the world.

Streptococci are gram-positive stained with aniline dyes, often in pairs; chains and individual cocci can also be found. According to morphological and biochemical characteristics, these microorganisms are similar to pneumococcus, which was first discovered by Frenkel-Wekselbaum (1886). Microbes are non-motile and grow on nutrient medium supplemented with serum or blood, as well as on maltose semi-liquid agar. Among laboratory animals, young white mice are the most sensitive.

Research and methods.

Research Epizootic case of streptococcosis was studied in farms specialized in livestock breeding of Olot district of Bukhara region. A total of 150 head of lambs were examined at the livestock farm in this district, and streptococcal diseases were found in 32 heads. Using pathomorphological and bacteriological tests, pathogens were isolated from parenchymatous organs.

Epizootological data, clinical symptoms, pathologoanatomical changes, cultural-morphological characteristics of the causative agent and final bacteriological examinations were taken into account.

Results.

Young newborn calves, lambs and piglets can be infected with streptococcus for 1-2 days, sometimes up to a week, if not treated, it is observed in acute and chronic forms. Severe pain is felt around the navel, there is swelling, when palpated, a smelly pus exudate is released, 10% of deaths due to the disease, 10-20% of complications in the disease. In an acute condition, it is characterized by an increase in body temperature up to 41-42 °C, increased heart rate and breathing, intense redness of the conjunctiva, and a large amount of purulent discharge from the nose. The heart beats frequently, the appetite disappears, and death occurs within 1-2 days. In the semi-acute form of the disease, the joints are swollen, painful, and temperature is observed in those places. Diarrhea often develops in lambs and piglets, the feces are foamy, liquid consistency mixed with mucus and blood. Animals quickly become emaciated and emaciated, and if not treated, death occurs in 2-3 days.

When the disease becomes chronic, older animals (calves and heifers 2-4 months old, pigs and lambs older than 1-2 months) are occasionally observed with severe symptoms of fever, diarrhea and pneumonia. Serous-mucous and then purulent discharges appear from the nose; Cough is dry and rare at first, then becomes wet, frequent and painful. Auscultation reveals wheezing and bronchial breathing, and percussion reveals dullness in the front lobes of the lungs. If it is not treated in time when clinical signs are observed, it is absorbed into the blood, spreads throughout the body and develops septicemia, and the infected animal dies. Animals that recover from the disease are retarded in growth and development and are carriers of streptococci.

Pathomorphological changes. When the disease passed in acute and semi-acute forms, many hemorrhages were observed in the mucous and serous membranes of dead animals. Bloody exudate in the abdominal cavity, pleura, yellow fluid (100 ml) in the pericardium and fibrinous compounds were detected in the liver. The spleen is enlarged, cherry-black in color, the capsule is tense, the edges are rounded, under the capsule there are clear and spotted hemorrhages, the consistency is dense, and it looks rubbery when held. Mesenteric lymph nodes are enlarged. There are hyperemic blood clots in the mucous membranes of the small intestine. The front and middle lobes of the lungs are compressed, hyperemic planes are detected.

Conclusion.

Streptococcus causes specific pathological changes in the body of lambs. Vaccination against diseases and disease prevention measures in livestock farms will be appropriate if they are carried out in a timely manner.

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