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TREATMENT AND PREVENTION OF MASTITIS IN GOATS

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Abstract
This article presents literature data on mastitis, a disease that occurs in dairy animals among farm animals. The article is devoted to a detailed study of clinical signs in goats with mastitis. In addition, methods for diagnosing mastitis and recommendations for treating the disease are given.

Keywords: Goat, mastitis, treatment, prevention, mechanical, chemical, climatic, biological.

Introduction

Mastitis is an inflammation of the udder tissue, which occurs in all mammals, gradually leading to pathological changes in the udder tissue, leading to partial or complete destruction of the udder and, in some cases, even the death of the animal. It is characterized by an increase in the cost of treating the disease and sometimes causing early culling of animals, which is a major economic blow to goat farms. Mastitis in goats, as in cows, has two forms: clinical and subclinical (hidden), but clinical mastitis is very important for this type of animal. Because clinical mastitis is divided into two types: “gangrenous mastitis” and “non-gangrenous mastitis”. Gangrenous mastitis is relatively more common and causes damage to the general condition of the animal, and in this case the animal has little chance of recovery. Non-gangrenous mastitis is milder and the animal has a relatively high chance of recovery.

The disease often occurs when animals are kept in unsanitary conditions, that is, in animals kept in conditions with dirty bedding, high humidity, in very cramped barns, when grazing on uneven, steep areas with bushes, stones and bushes, as a result of abrasion and injury to the udder, as a result of cold exposure of the udder and feeding animals with poor-quality feed.

Microorganisms can enter the udder from the outside through the udder canal and through the blood and lymphatic channels. In addition, the mammary gland can be affected as a secondary disease due to infectious diseases such as tuberculosis, actinomycosis and proteinuria. One of the causes of inflammation of the udder is poisoning (intoxication).

The cause of mastitis is caused by biological, mechanical, climatic, alimentary and thermal factors. The disease occurs mainly due to a decrease in the body's natural resistance. The main causative agents of the disease are staphylococcus in 26.9% of cases, streptococcus in 25%, Escherichia coli in 28.2%, as well as salmonella, diplococcus, bacteria and fungi.

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The degree of knowledge of the problem. Mastitis is an inflammation of the mammary gland that develops as a result of the influence of mechanical, chemical, climatic and biological factors on the animal's body [1]. It is one of the most common diseases of lactating goats in production conditions, affecting more than 20% of the total population. Animals infected with mastitis are potential carriers of pathogens of many infectious diseases, such as escherichiosis, staphylococcosis and streptococcus. The economic damage of the disease consists in a decrease in productivity, the destruction of animals and their milk, as well as the cost of antibiotics [2].

Goat milk with mastitis should be disposed of in accordance with sanitary requirements due to the presence of bacterial microflora in its composition. Such milk should not be used for feeding children, as this contributes to digestive problems, growth retardation and the development of infectious diseases. Therefore, it is either destroyed or used for feeding adult animals after boiling [3].

The udder of goats is represented by two udders, each of which is separated from the neighboring one by a special protective membrane to prevent the penetration of pathogenic microorganisms. Mastitis refers to diseases that occur in acute and chronic stages. The initial stage of the disease is characterized by a latent period with a slight decrease in milk yield, which may be manifested by an increase in the animal's body temperature. Signs of compaction and hardening of the udder appear, one of the udders increases in size. Then the quality indicators of the milk change, it contains clots and blood impurities, its normal color changes.

According to the nature of the inflammation, serous, catarrhal, hemorrhagic and purulent-catarrhal mastitis are distinguished [4].

Serous mastitis is characterized by the release of a fluid consisting of proteins and, during inflammation, blood elements. The release occurs in the connective tissue between the alveoli. Catarrhal mastitis occurs in the glandular and integumentary epithelium. Leukocytes migrate to the mucous membrane of the mammary ducts, forming an exudate. This type of mastitis is the most common and can occur two weeks after lambing.

Hemorrhagic mastitis occurs in an acute form and is accompanied by the appearance of edema. Blood enters the alveoli and is characterized by impaired blood circulation in the mammary ducts. The purulent-catarrhal form is a complication of inflammation of the mammary gland. If improperly or not treated in a timely manner, it leads to amputation of the udder [5].

Mastitis can occur due to non-compliance with sanitary and hygienic standards in animal care. Pathogenic microorganisms enter the mammary gland through the openings in the chest or due to various injuries to the udder. The main cause of mastitis is a long delay of milk in the udder. Poor nutrition, care, and poor milking conditions contribute to a weakened immune system in females, rapid reproduction, and the development of inflammatory processes [4,5].

Currently, the most accurate way to diagnose mastitis in animals is through laboratory tests and special express tests at home. For testing, milk from an animal suspected of having the disease is taken to the laboratory, where, based on the bacteriological results, the disease is diagnosed.

Insemination, an appropriate antibiotic is selected. If this is not possible, a special preparation is introduced - Mastitis AF. To diagnose the disease, approximately 1 ml of milk from each share should be milked into a sterile glass. Add the same amount of the preparation to it and look at the resulting color and consistency. A yellow-orange color and unchanged milk rule out mastitis, and a light green or bluish color and jelly-like consistency indicate the presence of mastitis. It is also

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effective for bacteriological microflora [6].

Mastitis is mainly treated with various antimicrobial drugs. Subcutaneous injections, administration of drugs through the milk duct and external ointments are used.

Feeding regimen during the illness: during the illness, it is necessary to limit the intake of juicy foods and avoid stimulating milk production. If mastitis is treated successfully, then in 70% of cases, milk production is restored.

Most rare cases of restoration of mammary gland function occur after subsequent feeding [1,2].

Conclusion

Based on the above, we can conclude that, despite their unpretentiousness, goats are still prone to various diseases, including mastitis. Only the organization and maintenance of proper milking equipment, hygiene in the premises will allow you to get a healthy animal capable of providing the farm with good dairy products.

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