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Causes of Mastitis in Cows

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ABSTRACT

The clinical symptoms, general causes, and diagnosis of mastitis in dairy cows are discussed in this article.

KEYWORDS: *mastitis, purulent, serous, catarrhal, fibrinous, hemorrhagic, mammary, clinical, subclinical, gynecology, cattle, disease, prevention, subinvolution, infection, etc.*

One of the pressing concerns is supplying the population of our country with the high-quality, environmentally sound animal products they want, as well as maintaining food safety and developing the production and processing of dairy products.

Research on the development of keeping parameters based on zoohygienic and veterinary sanitary requirements in different climatic conditions of our Republic is being done in order to study the indicators of keeping, productivity, and calving of bred cows brought from abroad in different climatic conditions of our Republic. Studying the root causes of subclinical and chronic mastitis infections in cows, using locally available raw materials for therapy and prevention, and testing novel medications are all seen as essential challenges.

Many international and domestic specialists agree that 20–30% of cows in dairy farms are mastitis-infected at any given time. Mastitis is a threat to human health and has a significant negative financial impact on the economy.

If the average incidence of mastitis in dairy cows imported into our country is between 18 and 22 percent, this indicator ranges between 10.7 to 71.6% in other nations. The development of diagnostic techniques, the treatment and prevention of mastitis in cows in various forms, its genesis, course, and continuance, as well as other proactive measures, have all been the subject of much scientific investigation, which is reflected in the literature. (O.U. Koldoshev 2016, A.P. Studentsov 2000, etc.).

One of the primary factors preventing dairy cows from increasing their milk supply and the quality of milk and milk products is mastitis in the udders of the cows. Mastitis is a condition that affects the mammary gland but is not yet symptomatic. It may also be accompanied by serous, catarrhal, fibrinous, or hemorrhagic inflammations that are localized or progress to a life-threatening septic phase. One of the primary conditions rendering dairy cows unusable is mastitis.

When inspecting cows, particularly during the weaning and calving seasons, it is important to consider their physiological health. During this time, there are little clinical indications of mastitis. Therefore, in addition to assessing the overall health of the cows, the mammary glands are crucial when performing obstetric dispensation.

Mastitis is a mammary gland inflammation that happens as a result of mechanical, thermal, chemical, and biological causes. According to A. P. Studensov, the location of the diseased process, the pathogenic properties of the causative agent, the status of the organism, and the responsiveness of the

mammary tissue are all factors that affect the course and outcomes of mastitis. During nursing and weaning, mastitis can develop.

Despite the fact that the disease's causative agents have a common morphology, many kinds of inflammation may co-develop due to their biological traits, udder tissue, and organism responsiveness. Depending on the clinical course and documented morphological changes, several bacteria may simultaneously contribute to the same udder inflammation. Salmonella, Escherichia coli, streptococci, and staphylococci are some examples of the pathogens that can cause serous mastitis as well as catarrhal, fibrinous, or hemorrhagic mastitis. In addition to bacteria, viruses, fungi, and mycoplasmas can also grow during mastitis, and it is possible for mastitis to progress in an aseptic state (without a pathogen).

Mastitis can occur in imported high-yielding dairy cows for a variety of reasons, including keeping the animals in various climatic conditions, age, genetics, udder anatomy, high milk production, decreased animal resistance due to a lack of vitamins and minerals in the body, and hormone deficiency in farms. The major cause of the aforementioned illnesses is the inability to implement sanitary measures and the delayed cleaning of waste in filthy animal farms.

References

1. Студенцов А.П., Шипилов В.С., Никитин В.Я. и др. Ветеринарное акушерство, гинекология и биотехника размножения. Москва, Колос, 2000.
2. Норбоев К.Н., Эшбуриев С.Б., Сулаймонов М.А. Сигирларнинг витамин ва минераллар алмашинуви бузилишларида қоннинг морфобиокимёвий кўрсаткичлари // Ўзбекистонда озиқ-овқат дастурини амалга оширишда қишлоқ хўжалик фани ютуқлари ва истиқболлари мавзусидаги Республика илмий-амалий конференцияси материаллари тўплами, 2 қисм, - Самарқанд, 2015. – Б. 9-12.
3. Norboev Q.N., Sulaymonov M.A.Yuqori mahsuldor sigirlarda alimentar bepushtliklarning oldini olish bo‘yicha tavsiyalar // Tavsiyanoma: (O‘zbekiston Respublikasi veterinariya va chorvachilikni rivojlantirish davlat qo‘mitasi tomonidan tasdiqlangan 25.10.2021 yil .) Samarqand, 2021. – b. 20.
4. Эшбуриев Б.М. Ветеринария акушерлиги. Дарслик. Самарқанд. 2019. 511
5. Қўлдошев О.У., Мавлонов С.И. Мастит касаллигини даволаш препаратлар самарадорлигини аниқлаш. Бешинчи халқаро илмий конфренция “Ҳайвон ва паррандаларда ўта хавфли касалликларининг тарқалиши ва уларга қарши курашиш чоралари” Самарқанд 2016 йил.63-65 б.