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STUDY OF THE ETIOLOGY AND TREATMENT OF PURULENT ENDOMETRITIS IN PUREBRED COWS OF THE NUKUS REGION

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Abstract

This scientific article presents the results of a study of the etiological factors, clinical signs and methods of treatment of purulent endometritis in purebred cows kept at the Koniratbay-Mehri farm in the Nukus region of the Republic of Karakalpakstan.The primary objective of the study was to identify the causes of uterine inflammation in cows during the postpartum period and develop effective treatment methods. The study included clinical, rectal, and vaginal examinations of the animals, as well as laboratory analysis of uterine secretions. The obtained results showed that purulent endometritis most often develops in the postpartum period and is associated with difficult childbirth, retention of the placenta, failure to comply with sanitary and hygienic requirements, and exposure to pathogenic microflora.

The sick cows exhibited clinical signs such as purulent discharge from the genital tract, uterine enlargement, and impaired reproductive function. Treatment included antibacterial medications, uterine lavage with antiseptic solutions, and anti-inflammatory therapy. These treatments yielded positive results and contributed to the restoration of the animals' reproductive function.

Keywords

Pedigree cows, purulent endometritis, etiology, uterine inflammation, veterinary gynecology, treatment.

Introduction

Livestock breeding is one of the important sectors of agriculture and is of great importance in providing the population with food products. In particular, in the field of cattle breeding, increasing the productivity of cows, maintaining their health and improving their reproductive performance are urgent tasks. Diseases of the reproductive system of cows are one of the factors causing economic losses in livestock farms, among which uterine diseases occupy a special place. Among the diseases that occur in cows in the postpartum period, endometritis is widespread, which is characterized by inflammation of the mucous membrane of the uterus.

The purulent form of endometritis is one of the most dangerous types, disrupting the reproductive function of cows, leading to infertility and negatively affecting the economic efficiency of livestock farms. If this disease is not detected in time or not properly treated, cows will experience disruption of the sexual cycle, reduced fertility rates and long-term reproductive problems.

Purulent endometritis develops mainly in the postpartum period and is caused by various etiological factors. In particular, difficult childbirth, delayed placental separation, non-compliance with sanitary and hygienic rules during childbirth, a decrease in the body's overall resistance, and the penetration of various pathogenic microorganisms into the uterine cavity contribute to the development of the disease. Bacterial microflora, in particular staphylococci, streptococci, Escherichia coli, and other pathogenic microorganisms, increase the inflammatory process in the uterine mucosa.

Today, veterinary practice uses various methods to treat endometritis in cows. However, this problem still remains relevant due to the insufficient organization of measures for the prevention and treatment of the disease in some farms. Therefore, in-depth study of the etiological factors of purulent endometritis in cows, early detection of the disease, and development of effective treatment methods are of significant scientific and practical importance.

Postpartum diseases, in particular purulent endometritis, are also common in purebred cows kept on livestock farms in the Nukus district. This disease negatively affects the reproductive performance of cows and causes economic losses to farms. Therefore, it is important to study the etiology of the disease, identify its clinical symptoms, and apply effective treatment methods in the conditions of this region.

The main goal of this research is to study the etiological factors of purulent endometritis in purebred cows kept in the Nukus district, to determine its clinical course, and to develop effective treatment methods.

Materials and methods of the study

The study was conducted among purebred cows kept in livestock farms of the Nukus district. Cows with symptoms of purulent endometritis in the postpartum period were selected as the objects of the study.

Clinical examinations were performed using the following methods:

1. General clinical examination
2. Rectal and vaginal examination
3. Laboratory analysis of uterine discharge

The treatment included antibacterial drugs, uterine lavage solutions, and anti-inflammatory agents. The effectiveness of treatment was assessed by the disappearance of clinical symptoms and the restoration of reproductive function.

Research results

According to the research results, the following factors were identified as the main causes of the development of purulent endometritis in the farms of the Nukus district:

1. difficult childbirth
2. delayed separation of the placenta
3. failure to comply with postpartum hygiene rules
4. decreased overall body resistance

5. bacterial microflora (staphylococci, streptococci and other pathogenic microorganisms)

6. The following clinical signs were observed in diseased cows:

7. purulent discharge from the genital tract

8. increased uterine size

9. decreased general condition of the animal

10. disruption of the sexual cycle

During the treatment, washing the uterus with antiseptic solutions and using antibacterial drugs gave good results. After treatment, clinical signs decreased in most cows and reproductive activity was restored.

Discussion

The results of the study showed that purulent endometritis is one of the most common reproductive diseases in purebred cows kept on livestock farms in the Nukus district. The data identified during the study confirm that the disease develops mainly in the postpartum period, and a number of etiological factors play an important role in this process.

Observations have shown that the development of the disease is often caused by difficult childbirth, delayed separation of the placenta, the penetration of pathogenic microorganisms into the uterine cavity, and a decrease in the overall resistance of the animal's body. In such conditions, the uterine mucosa becomes inflamed under the influence of microorganisms, resulting in a purulent process. The clinical signs observed during the study, in particular, purulent discharge from the genital tract, uterine enlargement, deterioration of the general condition of the animal, and disruption of the reproductive cycle, are typical signs of the disease.

The results showed that insufficient compliance with sanitary and hygienic rules on farms also significantly affects the development of the disease. In particular, insufficient veterinary supervision during childbirth and inadequate postpartum care conditions increase the risk of developing purulent endometritis in cows.

The complex therapy used in the treatment process, namely, washing the uterus with antibacterial drugs, antiseptic solutions, and the use of anti-inflammatory agents, gave good results. After treatment, the clinical signs in the cows gradually decreased, and the physiological state of the uterus began to recover.

The general condition of the animals also improved, and reproductive activity was restored. This indicates the effectiveness of complex treatment methods.

At the same time, the results of the study showed that prevention is more effective than treatment. The risk of developing purulent endometritis can be significantly reduced by properly organizing the birth process, strictly adhering to sanitary and hygienic requirements, keeping cows under veterinary supervision in the postpartum period, and properly organizing their nutrition.

Thus, the results of the conducted research show that studying purulent endometritis in pedigree cows in the Nukus district, its timely detection, and the use of effective treatment measures are of great importance in improving the reproductive health of cows in livestock farms.

Conclusion

As a result of studying the etiology of purulent endometritis in purebred cows kept in livestock farms of the Nukus district and analyzing treatment methods, a number of important scientific and practical conclusions were drawn.

Studies have shown that purulent endometritis is one of the most common reproductive diseases in cows, developing mainly in the postpartum period. The main etiological factors in the development of the disease are difficult childbirth, delayed placental separation, non-compliance with sanitary and hygienic rules in the postpartum period, and a decrease in the body's overall resistance.

In addition, it was found that various pathogenic microorganisms, in particular bacterial microflora, cause the development of an inflammatory process in the uterine mucosa.

During the study, clinical signs such as purulent discharge from the genital tract, an increase in the size of the uterus, deterioration of the general condition of the animals, and impaired reproductive function were observed in infected cows. These signs are important diagnostic indicators in determining the disease.

During the treatment process, washing the uterus with antibacterial drugs, antiseptic solutions, and the use of anti-inflammatory agents gave a good therapeutic effect. As a result of the use of complex treatment methods, clinical signs decreased in most cows, uterine activity was restored, and reproductive indicators improved.

The study also showed that prevention of purulent endometritis is important in livestock farms. The risk of this disease can be reduced by conducting the birth process under the supervision of veterinary specialists, proper care of cows in the postpartum period, compliance with sanitary and hygienic requirements, and proper feeding of animals.

In general, in the conditions of the Nukus district, timely detection of purulent endometritis in pedigree cows, in-depth study of its etiological factors, and the use of effective treatment measures will help improve the reproductive health of cows, reduce infertility, and increase the economic efficiency of livestock farms.

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