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CLINICAL SIGNS AND FREQUENCY OF POSTPARTUM ENDOMETRITIS IN BREEDING COWS

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ABSTRACT

The main factors causing postpartum endometritis in imported dairy cows in our country are the low level of feeding and housing conditions, lack of motivation, the incidence of this disease on farms is more common in spring and winter, complications of endometritis, increased service life of cows, several times of repeated intercourse, loss time, decreased milk production, untimely calving and even infertility after effective treatment of the disease, and the exclusion of cows after the third birth can cause significant economic damage to farms.

KEYWORDS: *Breeding Cows, Endometritis, Purulent-Catarrhal, Infertility, Cervicitis, Ovarian Dysfunction, Trauma, Etiology, Opportunistic Microorganisms.*

INTRODUCTION

The livestock breeders of the republic are faced with the urgent task of providing the population of our country with ecologically clean local food. To solve this problem, it is necessary to increase the herd population, prevent various diseases of the uterus and infertility of cows, increase milk production and reduce early weaning of cows. The main factors affecting the fertility of cows on dairy farms are congenital and postpartum diseases, as a result of which cows develop endometritis, cervicitis, ovarian dysfunction and others.[2,3 ,5,9, 10,11].

Endometritis - is an inflammation of the lining of the uterus. Depending on the course of endometritis: acute, semi-acute and chronic, depending on the manifestation, it has a clear clinical sign and is latent. Acute endometritis can be catarrhal, purulent, purulent-catarrhal, fibrinous, necrotic and gangrenous, depending on the form of inflammation[6].

After childbirth, various microorganisms enter the genital tract and cause serious diseases of the genital organs. Microorganisms can enter the genitals in 2 ways: exogenous and endogenous[7].

Microorganisms enter the genitals when they help to give birth exogenously through the hands of an obstetrician, tools, dirty bedding and other objects. Microorganisms endogenously enter the genitals long before birth. These are saprophytes trapped in the uterus or vagina, and microorganisms prone to disease when the body's defenses are weakened[1].

In recent years, endometritis has become very common among cows, causing significant economic damage to dairy farms. The disease was diagnosed on average from 24.6% to 44% of cows[9]. In the Republic of Dagestan, the incidence of endometritis is recorded in 50% of pedigree cows of the Red Desert, about 30% in brown Caucasian and Swedish cows, in 10.5% in Simmental cows and in 9% in local cows[8].

A survey of existing cows on the farms of the Vologda and Vladimir regions revealed the incidence of acute postpartum endometritis in cows from 29.8% to 32.4%[9].

In the farms of the Krasnodar Territory, postpartum endometritis ranged from 5% to 40% among frequently infected cows at different times of the year[4].

Taking into account the above, the study of regional etiological factors causing postpartum endometritis among imported cows in the country, the degree of their occurrence and clinical signs is of great scientific and practical importance.

Research purpose. In connection with the above, the study of regional factors causing postpartum endometritis in imported cows in our country, the degree of their occurrence and clinical signs was carried out.

Research object and methods. Studies, including the study of regional factors, the degree of morbidity and research work related to the clinical signs of postpartum endometritis, were carried out in the "Feruzjon Boglari" of the Samarkand region and the district, the livestock farm "Farovon Grand Invest" in the Akdarya district, the livestock farm "Agro Gold Spring" in the Narpay district, the livestock farm "Utkir Chorvo Invest" in the Pakhtachinsky District.

The frequency of postpartum purulent endometritis in farms, the number of days after birth, the onset and symptoms of the disease, the etiology and pathogenesis of the disease were studied. Methods of obstetric and gynecological examination G.A. Cheremisinov and others, namely: time, quantity (ml), color, pH (medium), the consistency of the liquid secreted from the genital organs of cows; the clinical signs of the disease, urinary incontinence, and changes in posture were studied and diagnosed.

Research results. A study of the incidence of postpartum endometritis in 2020 in the Feruzjon Boglari farm of the Samarkand region and the district, the Farovon Grand Invest livestock farm in the Akdarya district, during a clinical examination of 47 cows that gave birth in winter, 9 of them revealed the presence of purulent catarrhal endometritis with clear clinical signs and this figure was 17.39% in a clinical examination of 37 cows that gave birth in the spring, 9 of which had purulent-catarrhal endometritis with obvious clinical signs, and 31.87% in a clinical examination of 22 cows that gave birth in the summer, 1 of them had purulent - catarrhal endometritis and this indicator was 4.54%, and during a clinical examination of 28 cows who gave birth in the fall, the presence of purulent-catarrhal endometritis was detected in 2 of them with obvious clinical signs and this indicator was 7.14%.

Similarly, in 2020, a clinical examination of 19 cows that gave birth in winter at the Agro Gold Spring farm in Narpay district of Samarkand region revealed the presence of purulent catarrhal endometritis in 4 of them, it was 21%, of 22 cows that gave birth in the spring underwent a clinical examination and 5 of them were diagnosed with purulent-catarrhal endometritis and it was 22.72%, 16 cows who gave birth in the summer were clinically examined, of which 1 had purulent-catarrhal endometritis and it was 6.25%, in 17 cows who gave birth in the fall during a clinical examination in 1 of them was found to have purulent-catarrhal endometritis with clear clinical signs at the beginning, and it was noted that it was 5.88%.

When examining 17 cows that gave birth in the winter months at the Utkir Chorvo Invest livestock farm in the Pakhtachinsky district, it was found that 3 of them have purulent-catarrhal endometritis, and it is 17.64%, with a clinical examination of 20 cows that gave birth in the spring months, 4 of them revealed the presence of purulent-catarrhal endometritis with obvious clinical signs, and it was found that it is 20%, during a clinical examination of 14 cows who gave birth in the summer months, 1 of them revealed the presence of purulent-catarrhal endometritis, which was 7.14%, a clinical examination of 15 heads of cattle that gave birth in the fall revealed the presence of purulent-catarrhal endometritis in 1 of them, which at first had obvious clinical signs, which amounted to 6.58%. Similarly, at the Utkir Chorvo Invest livestock farm in the same area, 17 cows that gave birth in the winter months were examined, of which 4 have purulent-catarrhal endometritis with obvious clinical signs, which amounted to 23.52%, a clinical examination of 16 cows that gave birth in the spring, revealed the presence of purulent-catarrhal endometritis in 5 of them, which was 33%, during a clinical examination of 12 cows that gave birth in the summer, the presence of purulent-catarrhal endometritis with clinical signs was revealed in 1 of them, which amounted to 8.33%, with clinical Examination of 13 cows that gave birth in the fall revealed the presence of purulent-catarrhal endometritis with clinical signs at the beginning in 1 of them, and this amounted to 7.69%.

During the seasonal analysis of the survey data obtained, it was noted that purulent-catarrhal endometritis with more pronounced clinical signs is more common in winter and spring. At the same time, in 2018, 84 cows were clinically examined that gave birth in the winter months from 4 farms, of which 15 (18.89%) cows, during a clinical examination, 91 cows gave birth in the spring of which 23 (26.40%) cows, during a clinical examination of 72 cows that gave birth in the summer, of which 6 (8.56%) cows, and during a clinical examination of 82 cows that gave birth in the fall, it was revealed that 5 (6.84%) cows were diagnosed with the initial stage of purulent-catarrhal endometritis and processes with clear clinical signs.

In cows, the processes of purulent-catarrhal endometritis were mainly acute and chronic, with the release of a grayish-white fluid from the uterus, mainly in most animals 5–6 days after birth. Mixed purulent discharge of caruncles and rotten fragments of the placenta from the uterus of some cows was observed when the animal strained, lay down or massaged the rectum with his hands, and in most cases the exudate hardened in the abdominal part of the tail. There was edema, redness and hemorrhage on the mucous membrane of the vagina and cervix, the exudate from the uterus was collected in the vaginal corridor, especially in front of the cervix, the cervical canal was opened 1-2 fingers wide.

When we examine the uterus through the rectum, the wall of the uterus becomes hollow, in some cases of a pasty consistency. Although the general condition of the cow was satisfactory, there

was a decrease in the amount of milk. The animal walks and feeds with the general herd. The general condition of the cow depends on the state of purulent-necrotic processes in the uterus, depending on the severity of the process, its general condition worsens, bends, weakens, begins to lose weight dramatically and the overall temperature rises to 1-1.5 ° C.

In pedigree dairy cows in the republic, the main factors causing postpartum endometritis are metabolic disorders and a decrease in immunobiological properties due to low nutritional levels and storage conditions and lack of mobility, as a result, opportunistic microorganisms enter the body through injuries of the uterus during childbirth. and cause the development of purulent-inflammatory processes 8-10 days (in some cases 3-6 days) after birth.

In recent years, the introduction of highly mechanized industrial technologies based on the standards of different countries for the storage and milking of pedigree livestock, some shortcomings in the design and construction of livestock buildings, increased the number of injuries and stress among animals and caused general discomfort. These stressful situations and general discomfort ultimately lead to a decrease in the resistance of animals and, as a result, the development of endometritis, cervicitis, ovarian dysfunction and other pathological processes in cows.

In many developed countries, postpartum endometritis is one of the leading obstetric and gynecological diseases, even among cows that are fed according to modern highly mechanized industrial technologies and are provided with modern veterinary services. The complications of the disease are severe; cows temporarily or permanently become infertile. Early diagnosis of the disease is not always achieved, and treatment does not give good results. In many farms, postpartum endometritis is poorly treated, and the treatment of animals is left to chance.

What complications are caused by untreated and effectively cured endometritis? The lifespan of the cows is increased. If a cow has a lifespan of 180 days, the farm will have to spend a lot of money, labor and time to heal that cow and mate it several times.

It is known that any disease that occurs in animals leads to a decrease in milk yield, which also causes great economic damage to the farm. If bacterial drugs, such as the tetracyclines group, are used to treat the disease, the economic damage increases again, as the economic damage caused by antibiotic use to dairy farms in developed countries averages 30% of farm profits. The cause of infertility, such as the inability to calve during similar economic losses and even after effective treatment of the disease, is exacerbated by the deregistration of cows after the third birth. If the deregistered cow was bought abroad, the economic damage to the farms will be even greater.

CONCLUSION

1. The main factors that cause postpartum endometritis in dairy cows in our country are the low level of feeding and storage conditions, lack of motivation, leads to the ingestion of opportunistic microorganisms through lesions of the uterus during childbirth and the development of purulent-inflammatory processes due to metabolic disturbances. and a decrease in immunobiological properties.

2. In a clinical examination of 84 animals from farms, of which 15 cows (18.89%), in a clinical examination in the spring, 91 cows gave birth, of which 23 cows (26.40%), in a clinical

examination of 72 cows that gave birth in the summer, of which 6 cows (8.56%) and in the fall, during a clinical examination of 82 cows that gave birth, it was revealed that 5 of them (6.84%) were infected with the initial stage of purulent-catarrhal endometritis and processes with obvious clinical signs.

3. As a result of complications of untreated and effectively cured endometritis, prolongation of the life of cows, repeated intercourse several times, loss of time, reduced milk yield, not getting a calf on time and even the cause of infertility even after effective treatment of the disease, it was noted that deregistration of cows after the third birth will cause great economic damage to farms.

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