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# Factors Causing Postpartum Endometritis in Cows, their Biological and Etiopathogenetic Characteristics.

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**Abstract:** During a clinical examination of 82 cows from farms in the winter months, 15 (18.82%) of them are cows, 30 (23.43%) of 125 cows that gave birth in the spring months, 6 (7.21%) of 82 cows in the spring months . in the summer months in cows and in the autumn months in 8 out of 96 cows (6.49%) and in the analysis of endometritis processes by species, 59 animals (15.3%) were infected, of which 31 animals (52.5%) had purulent catarrhal endometritis, in 15 animals (25.4%) purulent catarrhal endometritis of bacterial and fungal etiology was noted, and in 13 animals (22%) catarrhal processes of endometritis were noted.

**Keywords:** Pedigree cow, endometritis, purulent-catarrhal, infertility, cervicitis, ovarian dysfunction, injuries, etiology, purulent-catarrhal endometritis of bacterial and fungal etiology, opportunistic microorganisms.

#### Relevance of the topic.

Depending on the course of endometritis: acute, semi-acute and chronic, depending on the manifestation, it has a clear clinical sign and has a hidden appearance. Depending on the form of inflammation, acute endometritis is catarrhal, purulent, purulent-catarrhal, fibrinous, necrotic and gangrenous [6,2,3,5,9,10,11].

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

Microorganisms enter the genitals through hands, tools, dirty bed linen and other items of an obstetrician who helped give birth exogenously. Microorganisms enter the genital organs endogenously long before childbirth. These are saprophytic microorganisms that enter the uterus or vagina and tend to cause disease when the body's defenses are reduced [1].

In recent years, endometritis among cows has become very widespread, causing great economic damage to dairy farms. It has been established that the average number of cows infected with this disease ranges from 24.6% to 44%. In the Republic of Dagestan, up to 50% of red desert cows, 30% of brown Caucasian and Swedish cows, 10.5% of Simmental cows and 9% of domestic cows suffer from endometritis [8].

It has been noted that postpartum endometritis is from 5 to 40% among infected cows in different seasons of the year in the farms of the Krasnodar Territory [4].



Purpose of the study. Types of postpartum endometritis processes in our republic in pedigree cattle imported from abroad, the factors that cause them, the degree of incidence and specific clinical signs. Object and methods of research. Research and scientific study of the processes of postpartum endometritis in cattle, their species, factors causing them, the level of morbidity and characteristics of the clinical picture at the "Farovon Grand Invest" livestock complex in Akdarya district, at the "Agro Gold Spring" enterprise of the Narpay district livestock farm, at livestock farms "Khirmonga Baraka Ikrom", "Utkir Chorva Invest" and "Zhasurbek Khirmoni" of the Pakhtachi district of the Samarkand region.

We studied the incidence of postpartum endometritis in farms, the number of days after childbirth and the symptoms of the disease, the etiology and pathogenesis of the disease. Methods of obstetric and gynecological examination G. A. Cheremisinova methods, namely: time, quantity (ml), color, pH (environment), consistency of the fluid secreted from the genital organs of cows; clinical signs of the disease, changes depending on the state of urination, posture is studied and diagnosed on the left.

Research results. Scientific studies on the prevalence of postpartum endometritis, in 2019 at the "Farovon Grand Invest" livestock farm in the Akdarya district of the Samarkand region, during a clinical examination of 24 cows who gave birth in the winter months, it was found that 4 of them had purulent-catarrhal endometritis diseases with bright severe clinical symptoms, which amounted to 16.66%, during a clinical examination of 42 cows who gave birth in the spring months, it was found that 11 of them had purulent-catarrhal endometritis with severe clinical symptoms, which amounted to 26.19%, during medical examination 24 cows that gave birth in the summer months, it was found that 2 of them had purulent catarrhal endometritis, which amounted to 8.33%, during a clinical examination of 34 cows that gave birth in the autumn months, 4 of them catarrhal endometritis with obvious clinical symptoms, which amounted to 5.88%.

Similarly, in the "Agro Gold Spring" livestock complex of the Samarkand region, Narpay district, during a clinical examination of 12 cows that gave birth in the winter months, it was found that 3 of them had diseases of purulent-catarrhal endometritis, which amounted to 25%, during a clinical examination of 26 cows that gave birth in the spring months, it was found that 7 of them had purulent catarrhal endometritis, which amounted to 26.92%, during the medical examination of 14 cows that gave birth in the summer months, it was found that 1 of them had purulent - catarrhal endometritis, which amounted to 7.14%, during a clinical examination of 19 cows who gave birth in the autumn months, it was found that purulent catarrhal endometritis with severe clinical symptoms was detected in 1 of them, and it was noted that it amounted to 5.26 %.

In the livestock complex "Hirmonga baraka Ikrom" of the Pakhtachi district, when examining 11 cows that gave birth in the winter months, it was found that 2 of them had purulent catarrhal endometritis, which amounted to 18.18%, during a clinical examination of 21 cows that gave birth in spring months, it was found that 4 of them had purulent-catarrhal endometritis with severe clinical symptoms, which amounted to 19.04%, during a clinical examination of 16 cows who gave birth in the summer months, it was found that 1 of them had purulent - catarrhal endometritis, which amounted to 6.25%, during a clinical examination of 12 cows who gave birth in the autumn months, it was found that 1 of them had purulent catarrhal endometritis with severe clinical symptoms, which amounted to 8.33%. Similarly, in the livestock complex "Utkir Chorva Invest" in the Pakhtachi district, when examining 17 cows that gave birth in the winter months, it was found that 3 of them had diseases of purulent-catarrhal endometritis with pronounced clinical symptoms, which amounted to 17.64%, during a clinical examination of 16 cows that gave birth in the spring months, it was found that 4 of them had purulent catarrhal endometritis, which accounted for 25%, during a clinical examination of 16 cows that gave birth in the spring months, it was found that 4 of them had purulent catarrhal endometritis, which accounted for 25%, during a clinical examination of 16 cows that gave birth in the spring months, it was found that 4 of them had purulent catarrhal endometritis, which accounted for 25%, during a clinical examination of 16 cows that gave birth in the spring months, it was found that 4 of them had purulent catarrhal endometritis, which accounted for 25%, during a clinical examination of 13 cows that gave birth in the summer months, it was found that 1 of them purulent-catarrhal endometritis with severe clinical symptoms was detected, which amounted to 7.69%,



during a clinical examination of 14 cows that gave birth in the autumn months, purulent-catarrhal endometritis with severe clinical symptoms was detected in 1 of them, which amounted to 7.14%.

In the livestock farm "Zhasurbek khirmoni" of the Pakhtachi district, when examining 18 cows that gave birth in the winter months, it was found that 3 of them had diseases of purulent-catarrhal endometritis with pronounced clinical symptoms, which amounted to 16.66%, with a clinical examination of 20 cows that gave birth in the spring months, it was found that 4 of them had purulent catarrhal endometritis, which amounted to 20%, during the medical examination of 15 cows that gave birth in the summer months, it was found that 1 of them had purulent catarrhal endometritis endometritis with severe clinical symptoms, which amounted to 6.66%, during a clinical examination of 17 cows who gave birth in the autumn months, 1 of them had purulent-catarrhal endometritis diseases with severe clinical symptoms, which amounted to 5.88%.

When analyzing the survey data obtained by seasons, it was noted that purulent-catarrhal endometritis with clinical symptoms is more common in winter and spring. In 2019, 82 cows that gave birth in the winter months were clinically examined, of which 15 cows (18.82%), 125 cows that gave birth in the spring months were clinically examined, of which 30 cows (23.43%), during a clinical examination of 82 cows, who gave birth in the summer months, of which 6 cows (7.21%) and during a clinical examination of 95 cows who gave birth in the autumn months, it was found that 8 cows (6.49%) were infected with the initial stage of purulent-catarrhal endometritis and processes with severe clinical symptoms.

In 2019, when an obstetrician-gynecologist examined 385 heads of cows, when analyzing endometritis processes by species, it was revealed that 59 heads of animals (15.3%) were infected, and 31 heads of animals (52.5%) had purulent-catarrhal endometritis, in 15 purulent catarrhal endometritis of bacterial and fungal etiology was detected in animals (25.4%), and catarrhal endometritis processes were noted in 13 animals (22%) (Table 4).

In the "Farovon Grand Invest" livestock complex of the Akdarya district, the "Agro Gold Spring" livestock complex of the Narpay district, the "Khirmonga baraka Ikrom", "Utkir Chorva Invest" and "Jasurbek Khirmoni" livestock farms of the Pakhtachi district of the Samarkand region, 385 heads, in 2019 when examining 385 cows by an obstetrician-gynecologist, it was found that 59 of them (15.3%) had various forms of endometritis in the uterus (Table 4).

In the severe stage of postpartum purulent catarrhal endometritis, it was noted that sick animals lost their appetite, became weak, the body temperature of the animals exceeded the physiological norm, the base of the tail was covered with dry crusts of liquid. selection. When examined by vaginal and rectal methods, redness and bleeding of the entrance to the vagina and mucous membranes of the vagina, the uterus is located in the abdominal cavity, it was found that it does not contract at all. It has been established that 100-130 ml of a cloudy homogeneous mucous liquid of white, yellow or green color with an unpleasant odor is released from the uterus until morning.

In severe endometritis of bacterial-fungal etiology, sick animals showed a decrease in appetite, a decrease in milk yield, weakness, an increase in body temperature of animals by 1-1.5 °C and an increase in heart rate for 15-20 minutes. When examined by vaginal and rectal methods, hyperemia was noted at the entrance to the vagina and on the vaginal mucosa, and white loose films were found on the lower surface of the vaginal mucosa, it was found that the uterus is located in the abdominal cavity and does not contract at all. It has been established that 150 ml of a cloudy homogeneous mucous liquid of white, yellow or green color with an unpleasant odor is released from the uterus until morning.

The processes of catarrhal endometritis in cows are predominantly acute, and in most animals in the first days of childbirth, a mucous-turbid fluid was noted from the uterus. It has been noted that the placentas of some cows secrete a mixed white mucous fluid from the uterus when the animal moves,



lies down or massages by hand through the rectum, and in many cases the exudate freezes in the abdominal part of the tail. During vaginal examination, the mucous membranes of the vagina and cervix were pale red, edematous, some liquid secretions were rarely gray-red, and these clinical signs appeared mainly 2-3 days after the birth of animals and after the formation of the inflammatory process.

#### Conclusion

1. In severe cases of postpartum purulent-catarrhal endometritis in cows, it was noted that sick animals lost their appetite, were weak, the body temperature of the animals was above the physiological norm, the base of the tail was covered with dry crusts. liquid secretions.

2. Of the farms, during the medical examination, 82 cows were clinically examined who gave birth in the winter months, of which 15 cows (18.82%), during a clinical examination of 125 cows who gave birth in the spring months, 30 cows (23.43%), during a clinical examination 82 cows 6 cows (7.21%), who gave birth in the summer months, and during a clinical examination of 96 cows who gave birth in the autumn months, it was found that 8 cows (6.49%) were infected with the initial stage of purulent-catarrhal endometritis and processes with severe clinical symptoms.

3. Analyzing the endometritis processes identified in the farms by species, it was found that 59 animals (15.3%) were infected, and 31 animals (52.5%) had purulent-catarrhal endometritis, 15 animals (25.4%) had purulent - catarrhal diseases of bacterial origin and fungal etiology, in 13 animals (22%) processes of endometritis and catarrhal endometritis were noted.

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