

Business Development

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CAUSES AND DIAGNOSIS OF INFERIENCE IN HIGH PRODUCTIVE COWS

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Abstract

This article presents literature data on the causes and methods of diagnosis of infertility in cows with high milk production. Also, the results of obstetric and gynecological medical examinations in highly productive cows are given.

Keywords: Cow, high-yielding, infertile, hormone, diagnostic, hypofunction, ovarian, pituitary, hypothalamus, minerals and vitamins.

Introduction

Relevance of the topic. One of the main goals is to develop livestock farms in our republic based on modern innovative achievements of science, to provide a high-quality, highly nutritious food base, and to establish a plan to produce one calf per year from cows.

In the conditions of livestock farms developing on the basis of intensive technologies in our republic, due to non-compliance with the rules for feeding and caring for highly productive cows, ovarian hypofunction, which is one of the main causes of infertility, is often recorded, and as a result of prolonged infertility of cows, significant economic damage is caused to farms due to a decrease in milk productivity, calving, and a sharp reduction in the life span of productive cows. Therefore, it is urgent to develop and put into practice effective methods for early diagnosis and prevention of these pathologies [1].



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Studies have shown that infertility in cows and heifers of reproductive age can be detected at any time of the year by examining the genitals. Signs of infertility include a prolonged absence of sexual arousal, the lack of full value of artificial insemination, etc. Usually, cows show sexual arousal in the first month after calving - 18-24%, in the second month - 47-56%, and in the third month - 14-23%. The interval from calving to the first arousal is on average two months. Therefore, in production conditions, any cow that has not been inseminated within 60 days after calving should be considered infertile.

When an animal is undernourished, the body weakens, which also affects sexual processes (ovulation and ovulation do not occur). As a result of one-sided feeding of animals (protein, carbohydrate or fat), the function of the ovaries decreases, and their specialized tissue is gradually replaced by adipose tissue. The ovaries of obese animals not only become smaller, but also become denser, and the female animal first ovulates for a short time, and then completely stops ovulating [4].

According to literature sources, a lack of certain macro- and microelements (Mn, Cu, I, Fe, Se, Zn, P) in the composition of the diet of cows leads to metabolic disorders and disruption of reproductive functions [2].

Even when cows are fed normally, if metabolic disorders are observed (in diseases of the gastrointestinal tract and other organs), alimentary infertility can occur [5].

According to literature sources, the reason for the removal of cows from the main herd in 80-90% of cases is infertility, in 74-89% - metabolic disorders, in 17% - mammary gland diseases, in 19% - ovarian hypofunction, in 3% - follicular and luteal cysts of the ovaries, in 15-17% - diseases of the legs, in 14-16% - diseases of the digestive system, in 18% - low productivity. The average duration of use of cows on the farm is 2-6 lactations [4].

Even when animals are fed normally, if metabolic disorders are observed (in diseases of the gastrointestinal tract and other organs), alimentary infertility may occur [5].

The results of the study showed that in 30-40% of high-yielding cows, in most cases, the development of ovarian dysfunction, which leads to long-term infertility, and the weakening of reproductive functions in imported cows, high and constant production, and their intensive use in breeding work were identified as etiological factors.

In addition, the causes of infertility in high-yielding cows include: shortcomings in the organization and implementation of artificial insemination (unfavorable location of the point, the work and qualifications of the insemination technician-insemination,



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maintenance of primary documentation); insufficient veterinary measures (clinical and gynecological examination of sick animals with various pathologies in the manifestation of the sexual cycle in infertile animals, incorrect sexual cycle, untimely insemination, etc.).

There are many causes of infertility, the main ones being insufficient or insufficient nutrition, overfeeding, improper care, deficiencies in artificial insemination, as well as diseases of the genitals. By introducing a multidisciplinary obstetric and gynecological dispensary system on the farm, it is possible to identify the main causes of infertility in animals and eliminate them, thereby ensuring the production of calves from each cow (biological law).

During the obstetric and gynecological examination of cows in the postpartum period, the date of their last calving and the postpartum period were taken into account, with special attention paid to examining the genitals through the vagina and rectum, and the results of the examinations determined the condition of the vagina, cervix, uterus, fallopian tubes, and ovaries.

The course of the labor process, pathological births, the incidence of uterine prolapse, retained placenta, and vaginal prolapse were analyzed. The nature of the vaginal discharge, uterine subinvolution, and endometritis were determined by obstetric and gynecological dispensary examination of cows, as well as the timing of cows' arrival at calving and the level of fertilization.

According to the results of dispensary examinations of a total of 1,355 dairy cows on the experimental farm, there were 192 weaned cows with a low birth weight, 1,163 dairy cows with a low birth weight, 567 cows with a low birth weight in lactation, 523 cows that did not have a low birth weight for various reasons even after insemination, and 73 cows that remained infertile. Of these, 6% were found to have ovarian hypofunction, 8% to have follicular cysts, 3% to have corpus luteum cysts, 9% to have postpartum endometritis, 4% to have retained placenta, 2% to have various types of abortions, 3.84% to have mastitis, and 5.24% to have foot diseases in cows.

In general, 41.08% of the total dairy cows kept on the farm were found to be infertile. Clinical examinations were performed using a UTT device, artificial insemination results, and continuous monitoring.

Conclusions: 1. The causes of infertility in high-yielding cows are feeding, storage conditions, non-compliance with operational requirements, various stress factors,



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substandard microclimate, lack of masons, low qualification of inseminators and insufficient veterinary care.

2. As a result of the dispensary examination conducted on a total of 1163 dairy cows, the number of cows with a lacteal in lactation was 567, cows with a lacteal after weaning - 192, cows that did not have a lacteal for various reasons even after insemination - 523, and infertile cows that did not come to calve - 73 (41.08%).

References

- 1. Dyulger G.P., Xramov V.V. i dr., Lekarstvennыye sredstva, primenyayemыye v veterinarnoy akusherstve, ginekologii, andrologii i biotexnike razmnojeniya jivotnых: Spravochnoye posobiye. SPb.: Izdatelstvo «Lan», 2016, 2 7 2 s.
- 2. Sokolova O.V. Osenka bioresursnogo potensiala vыsokoproduktivnых korov pri razlichnых texnologiyax soderjaniya. Avtoref.diss... kand. biol. nauk 2007. S 19.
- 3. Studensov A.P., Shipilov V.S., Nikitin V.Ya. Veterinarnoye akusherstvo, ginekologiya i biotexnika razmnojeniya. Moskva, Kolos, 1999.
- 4. Eshburiyev B.M. Veterinariya akusherligi. Toshkent, Fan va texnologiyalar nashriyoti, 2018.
- 5. Xamitova L.F. Besplodiye korov v usloviyax Udmurtskoy Respubliki // Diss... // Ijevsk, 2019.
- 6. Eshburiev B.M., Djumanov S.M. Alimov B.S., Hayvonlar koʻpayish biotexnikasi. Darslik. Samarqand.: "SamDU tahririy-nashiriyot", 2023 yil
- 7. Alimov, B., Sidikov, B., Urazov, S., Yunusov, K., & Eshburiyev, B. (2024). Uterine subinvolution, ovarian hypofunction in productive cows and infertility as a result of their. In *BIO Web of Conferences* (Vol. 118, p. 01016). EDP Sciences.
- 8. Alimov, B. S., & Xamidov, M. X. (2023). SIGIRLARDA GINEKOLOGIK KASALLIKLARNI DAVOLASHGA YANGICHA YONDOSHISH. *AGROBIOTEXNOLOGIYA VA VETERINARIYA TIBBIYOTI ILMIY JURNALI*, 92-95.
- 9. Эшбуриев, Б. М., Алимов, Б. С., & Эрназаров, Б. (2023). СОҒИН СИГИРЛАР РЕПРОДУКТИВ КЎРСАТКИЧЛАРИГА "MIOSTA H®" ПРЕПАРАТИНИНГ ТАЪСИРИ. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 34(3), 142-145.



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10. Алимов, Б. (2024). Дисфункция яичников и субинволюция продуктивных коров и бесплодия и их последствия. *in Library*, I(4), 8-11.

- 11. Alimov, B. S., Sidiqov, B. T., & Eshburiyev, B. M. (2024). BEPUSHT SIGIRLARNING KLINIK MORFOBIOKIMYOVIY KO 'RSATGICHLARI. *Yangi O 'zbekiston ustozlari*, *2*(29), 13-16.
- 12. Алимов, Б. С., & Эшбуриева, Н. Ф. (2024). Методы фитотерапии и электролитно-регидратационная терапия при диспепсии телят.