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EFFECTIVE WAYS OF TREATMENT OF HIDDEN CHRONIC ENDOMETRITIS IN CATTLE IN KARAKALPAKSTAN

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Annotation

In this article, we examined the causes of the occurrence of latent chronic endometritis, which occurs in cows, the results of a laboratory examination, a biopsy of the uterine mucosa, and the results of histological examinations. We focused our experiments on treatment based on levofloxacin antibiotics, and ultimately proved in experiments the effective outcome of the treatment of latent chronic endometritis of cattle.

Keywords: Endometritis, nospecific, cyst, TLR receptorlari, biopsy, stroma.

Endometritis is one of the most serious problems in dairy farming — infertility of cows, low milk production, lagging breeding, early loss of high-yielding cows, and economic losses due to production costs for keeping, feeding, inspecting, and treating sick animals (Brill E. and et al., 1974).

There are acute, subclinical, and chronic inflammatory processes that occur with appropriate duration of infertility. The combined effect of three main factors plays a leading role in the etiology and nature of nonspecific inflammation of the genitals: a) trauma and infectious agents, b) decreased body resistance, c) adverse animal care conditions [1-125].

Given the absence of clinical signs, the diagnosis of occult endometritis in cows is made using physicochemical, bacteriological and histological methods [2].

One of the most common diseases of cow sex leading to symptomatic infertility is postpartum endometritis. According to many researchers, postpartum endometritis develops in 30-40% and in high-yielding herds - 70-80% of cows (Al Dashukaeva. M. And K. G., 2002). Pathology of the reproductive organs, including endometritis, leads to a decrease in the productivity of animals. Slaughter of infertile animals due to endometritis reaches 24-72% (1991 Kozlov V. F., G. G. Voskoboynik).

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The causes of endometritis are different, but in all cases the main role in the occurrence of inflammation is a microbial factor of uterine processes. Pathogenic microorganisms are direct pathogens of endometritis or complicate them (B. F., 1971; A. K. Savostin, 1971; A. K. Murtazin Seglinysh et al., 1977; A. A. Samolovov et al., 1980; IL. Muirsepp et al., 1984; L. A. Taranova, 1986; M. S. Saveschsaya et al., 1988; V. P. Goncharov, V. A. Karpov, 1991 Zyubin, 1987; I. N.; V. Ya. . Nikigin et al., 1994; B. F. Murtazin et al., 1995; V. V. Ivanov et al., 1998; K. G. Dashukaeva et al., 2000; A. N., 2001; G. Kuzmich Turchenko, 2002; V. A. Pegrov, 2002; L. A. Safronova et al., 1991; 1992 R. O. Gilbert). edometritis often occurs as a result of pathological processes, postpartum colds, various injuries during childbirth (V. Alblonsky et al., 1984; Z. Ya. Kosorlukova et al. The body's natural resistance, cellular and humoral immune status play an important role in the development of inflammatory processes in the genitals .

However, it should be noted that the study of the immune status of cows in endometritis is still poorly understood in the literature.

Latent chronic endometritis is a type of catarrhal endometritis characterized by poor morphological changes (on clinical examination). The use of sperm contaminated with conditionally pathogenic or pathogenic microflora may be the cause of the disease, resulting in infection during repeated improper fertilization [2-55].

In diagnosing the disease, it is also taken into account that the animal is not fertilized even after multiple inseminations. Usually the rhythm of the sexual cycle is not disturbed. During sexual arousal, a large amount of mucous and mixed mucous fluid flows from the genitals.

Toxic substances that accumulate in the uterus during latent endometritis have a lethal effect on sperm. Therefore, in order to restore the animal's fertility, it is necessary to clean the uterus from exudate and increase its tone. To do this, the use of tissue preparations and massage is highly effective. Sometimes washing the uterus with saline or soda-salt solution 1-2 hours before fertilization or directly before fertilization gives good results.

Chronic catarrhal-purulent endometritis is an acute or chronic catarrhal inflammation of the uterus that develops as a result of the entry of microorganisms into the uterus that cause purulent inflammation.

Laboratory tests of endometritis revealed the following results: streptococcus 66%, staphylococcus, Escherichia coli and fungi 19.5% [3: 21-23].

As a result of our observations, we observed that the pathological process also spread to the muscular layer. The mucous membranes were atrophied, the folds were straightened, and in some places a fungal or bearded growth of connective tissue was observed. Cysts of different sizes appeared instead of the uterine glands.

We observed that catarrhal-purulent inflammation of the uterus was accompanied by worsening of the general condition of the animal, loss of appetite and weight loss. Occasionally fever was noted. The sexual cycle was not observed or was not normal (anaphrodisia and nymphomania). Periodically, a white creamy catarrhal-purulent exudate flowed from the genitals. It seems that it is difficult to stop the pathological process [4: 169-171].

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However, because of the profound changes in the uterine mucosa after the disease, abortion can be observed even when the animal is pregnant. To date, the mechanism of disease onset has not been fully elucidated.

The latent form of endometritis is formed as a result of constant inflammation of the endometrium in the uterus. It occurs in response to any external factors: bacteria, their toxins, mechanical injury to the tissue, and so on. This happens as follows: TLR receptors are activated when pathogenic bacteria or their wastes enter the body. TLR receptors (Toll-like receptors). These are the main receptors of natural immunity through which the immune response is returned. In addition to pathogens, TLR receptors can be activated by certain fats and acids: lauric, palmitic, and oleic.

Thus, the diet of animals with a predominance of these acids can cause endometrial inflammation. In addition to nutrition, oxidative stress in cows can lead to endometrial inflammation. Regardless of the cause, chronic endometritis adversely affects the reproductive function of cattle. On the one hand, inflammatory proteins affect the synthesis of sex hormones and the regulation of the sexual cycle. On the other hand, the structure of the endometrium changes over time, and the uterus no longer appears or develops normally in the uterus.

Research methods and techniques

The aim of the study is to study the etiological factors of long-term infertility of high-yielding dairy cows in various farms of the Republic of Karakalpakstan and to find effective scientifically based methods for diagnosis, treatment and prevention of reproductive disorders in cows complicated by ovarian dysfunction.

To achieve this goal, the following tasks were solved:

1. Analysis of cattle breeding in "Lochin" and "Amir ak chashma" farms of Turtkul district and Ellikkala district.
2. The dynamics of acute, chronic and latent endometritis in postpartum cows were identified.
3. The prevalence of ovarian dysfunction in endometritis in cows was determined.
4. The physicochemical properties of the sexual secretions of clinically healthy cows and the uterine mucus of animals with acute, chronic and subclinical endometritis were studied.

In order to substantiate the diagnosis, a biopsy was taken from the uterine mucosa and histological examinations were performed. During latent endometritis, dystrophy and migration of the uterine mucosa, accumulation of lymphoid cells, rupture of the uterine glands, strong swelling of the stroma, blood clots were observed.

In addition, at present, our scientists suggest the use of modern drug Levofloxacin for the treatment of endometritis in cows.

Before treating occult endometritis, a bacteriological examination is recommended if the patient is aware that the disease is contagious in nature. Antibiotics (intrauterine) and prostaglandins, or their analogues: in the treatment of cattle subclinical endometritis is carried out with the same drug as in the acute form of the disease.

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We focused the experiments on a treatment based on the antibiotic levofloxacin. To do this, 60 cows (30 heads per farm) of different ages with latent chronic endometritis were isolated in two experimental farms. They were divided into 3 groups and each group was divided into 10 heads.
Levofloxacin antibiotic in group 1 sick cows. Sent into the muscle. This drug is a veterinary antibiotic with the latest bactericidal effect. It is completely absorbed into the body and reaches its maximum concentration within 2 hours after ingestion. Shows 100% effectiveness in 1-2 days in practice. The course of treatment is 3–5 days. 1 injection daily.
Our experiment was based on the fact that given that antibiotics affect active active cells and bacteria, we started treatment with antibiotics 2-3 days before the cows were weaned.
Group 2 cows were also treated with the antibiotic levofloxacin but this antibiotic was treated for 5 to 12 days after the burn, regardless of the cows 'burns. The course of treatment is 3–5 days. 1 injection daily. No drugs were used for group 3.

Table 1Experiment on the farm "Lochin"

Groups	Number of heads	Used antibiotic	Cows that escaped after 2 months of inspection	Re-treatment
1	10	Levofloxacin	8	2
2	10	Levofloxacin	6	4
3	10	The drug was not used	10	10

Table 2Experiment on the farm "Amir white spring"

Groups	Number of heads	Used antibiotic	Cows that escaped after 2 months of inspection	Re-treatment
1	10	Levofloxacin	6	4
2	10	Levofloxacin	7	3
3	10	The drug was not used	10	10

The proposed method for the treatment of endometritis was first developed taking into account the stages of the inflammatory process and the recovery processes in uterine tissue. Therefore, this method involves the use of a drug that differs in their effects in accordance with the specific features of the development of the disease.

Conclusion

Given that levofloxacin antibiotics affect active active cells and bacteria, initiating treatment 2-3 days before the cows are weaned gives an effective outcome in the treatment of latent chronic endometritis in cattle.

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References

1. Aghamiri, SM, Haghah, M., Ahmadi, M.R and Gheisari, H.R. 2014. Development multiplex PCR to detect major pathogenic bacteria after deliveryendometritis in dairy cows. Reproduction in pets
2. Ahmadi, M.R., Hussaini, A., Geyzari, H.R and Yavari, M. 2014. Initial treatment of postpartum endometritis with the use of intrauterine hyper-immunity serum in dairy cows. Journal of Reproduction in the Asia Pacific, Amiridis, GS., Ftenakizm GK, Dafopoulos, J., Papanicolau, T and Vrogianni, T.S.
3. Avezimbetov Shavkat Dosumbetovich. International Journal of Engineering and Information Systems (IJEAIS). Vol. 4 Issue 12, December - 2020, Pages: 21-23 Purulent Endometritis in Cows and Its Treatment.
4. Eshburiev B.M., Urazov Sh.A., Ilesov Z.I. materials of the International scientific-practical conference, posvyashchennoy pamyati professor D. X. Narzieva, Vitebsk, October 31 - November 1, 2019. - Vitebsk: VGAVM, 2019. Etiopathogenesis and features of subinvolutionary techenia in cows in conditions fermerskix khozyaystv respubliki uzbekistan.Stranitsa 169-171.