

POSTPARTUM ENDOMETRITIS IN COWS THEIR ECONOMIC EFFECTIVENESS IN TREATMENT WITH DIFFERENT METHODS

Niyazov H.B.

Professor,

S. B. Abdiev

Senior Teacher

Samarkand State University of Veterinary Medicine,
Animal Husbandry and Biotechnology

ABSTRACT

In the first group of animals with catarrhal endometritis, the treatment lasted an average of 8 days, in the second group, 10 days, and in the third group, 13 days, and in the first group of animals with purulent-catarrhal endometritis, the treatment lasted 9 days, in the second group, 11 days, and in the third group, 14 days. In animals with purulent-catarrhal endometritis of fungal etiology, using the improved method of treatment of endometritis in cows for 11, 13 and 15 days will prevent economic damage from 823,845 soums per head of milk cow, as well as an average of one per head of milk cow. allows to get economic benefit from 1617890 soums per year, and in this case the cost coverage is 3.9 soums.

Keywords. Purebred cow, endometritis, secretions, bacteria, microbial species, catarrhal endometritis, purulent-catarrhal endometritis, purulent-catarrhal endometritis of bacterial and fungal etiology.

RELEVANCE OF THE TOPIC

Clinical signs of acute catarrhal-purulent endometritis appear on 8-10, sometimes 6-7 days after childbirth and develop as a complication of placental abruption or acute subinvolution of the uterus. When the animal is lying down, when the animal is straining or when the uterus is massaged through the rectum, a brownish-brown or yellowish-brown colored exudate with a strong smell is observed. The labia and the base of the tail are contaminated with layers of purulent exudate [13; 2; 6;].

According to the author, during acute endometritis in cows, an increase in the number of macrophages, lymphocytes, and neutrophils was detected during cytological examinations of smears made from vaginal mucus, and in healthy cows, a sharp decrease in the number of macrophages, the absence of lymphocytes at all, and a 3-fold decrease in segmented and rod-shaped neutrophils [6; 7; 12; 9].

In acute endometritis, the redness is widespread and the uterus is mucous the veil swells. As the redness worsens, extravasation occurs

will be, that is, blood serum and even the shaped elements of the blood will leak through the walls of the vessels into the space between the cells of the uterus. The basis for the diagnosis is the fact that cows are infertile due to catarrhal endometritis, as well as the discharge of a large amount of pus-mixed cloudy mucous liquid from the genital tract during the animal's period [1; 4;14;15;16;17].

When cows with endometritis are examined through the rectum, the uterus is enlarged (3-3.5-month-old throat size), in the abdominal cavity, its walls are loose, with a pasty consistency, the discharge is barely noticeable or not noticeable at all. Fluctuations and mild pain are sometimes noted. When examined through the vagina, the mucous membrane of the vagina and the vaginal part of the cervix are reddened, hyperemia, dotted or streaked hemorrhages, discharge of purulent-catarrhal exudate from the canal of the cervix are characteristic. The general condition of the animal often does not change, in some animals, an increase in body temperature up to 1.0-1.50C, general weakness, a decrease in appetite and milk production are noted [5;10;11].

THE PURPOSE OF THE STUDY

Taking into account the above, it is necessary to determine the economic efficiency of effective methods of the effect of various pharmaco-therapeutic drugs in the treatment of post-partum endometritis processes in cattle farms and domestic cows in our country with antibiotics and other drugs.

RESEARCH OBJECT AND METHODS

Scientific examinations and experiments were conducted at the "Veterinary Surgery and Obstetrics" department of the Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology, at the "Farovon Grand Invest" livestock farm of the Okdarya district of the Samarkand region, in the laboratories of the Samarkand regional hospital.

For the experiments, 15 cows with post-partum endometritis processes were selected from the "Farovon Grand Invest" cattle farm, Okdarya district, Samarkand region.

Diseased animals were divided into three groups of 5 heads each based on the principle of similar pairs. The animals of the first experimental group were injected with 10 g of oxytetracycline, 4 ml of ASD 2, 1.5 g of tannin, 50 ml of fish oil, 1 g of fluconazole, 35 ml of distilled water and 20 ml of Penstrep - 400 preparation intrauterineally. Animals of the second experimental group were injected intrauterineally with 1 tablet of trichopol and iodopen, 20 ml of Penstrep-400 drug and 10 ml of acidvit were injected intramuscularly. In order to treat post-partum purulent-catarrhal endometritis, Limoxin - 200 10 ml was administered intramuscularly to animals of the third control group, the uterus was washed with a solution of K₂MnO₄ in a ratio of 1:5000, and 2 pieces of furazolidone were injected into the uterus.

ANALYSIS OF THE OBTAINED RESULTS

The conducted scientific investigations fully reveal the development chain of postpartum endometritis processes and help to develop a cost-effective treatment and prevention scheme with the use of new drugs in the treatment of postpartum endometritis processes.

The treatment in the first group of animals with catarrhal endometritis lasted an average of 8 days, in the second group 10 days and in the third group 13 days, in the first group animals with purulent-catarrhal endometritis the treatment lasted 9 days, in the second group 11 days and in the third group 14 days, bacterial and fungal and in animals undergoing purulent-catarrhal endometritis, it lasted 11, 13 and 15 days, respectively. However, it is worth noting

that the complete morphological recovery of uterine wall functions was observed long after the end of treatment.

Davlatov R.B., Norqabilov B.T., Kurbanov Sh.Kh. and M.Kh. The Shaykhamanov method was used [3; 8].

In this case, economic efficiency (Is), avoided damage and net profit (Ss) per 1 soum spent on veterinary measures were determined as criteria of economic efficiency. The purchase prices of the products were taken at the average current market prices.

Primary data used to determine cost-effectiveness are presented in Table 1.

The following equation was used to determine economic efficiency: $S_v = Q_{qm} - Q_{qvx}$, where

Table 1 Primary data used to determine the economic efficiency of the work

τ/p	Indicators	Traditional treatment method	Recommended treatment method
1.	Number of animals in the group, head	5	5
2.	Average daily amount of milk milked from each cow, kg	17,5	22
3.	Purchase price of 1 kg of milk, soum	6000	6000
4.	Cost of additional veterinary expenses (per head for 9 days, soums)		417445

S_v – economic efficiency obtained at the expense of one head of treated cow, soum;

Q_{qm} - value of additional product obtained at the expense of one head of treated cow, soum;

Q_{qvx} is the value of additional veterinary expenses spent on the treatment of one average head of cow, soums.

Identifying the Q_{qvx} . Economic efficiency was calculated in two experimental groups with 5 diseased dairy cows each, and in control groups with 5 diseased dairy cows. The average daily milk yield in the group with the best results of the experimental groups was 22 kg, and in the control group it was 17.5 kg. During the experiments, cows in the experimental group produced 4.5 kg more milk than cows in the control group.

The following drugs were used to treat dairy cows with purulent-catarrhal and fungal etiology purulent-catarrhal endometritis in the experimental group treated with the recommended method:

Oxytetrocycline 90 g - 45,000 soums, ASD 2, 4 ml 36 ml - 12,600 soums, tannin 12 ml - 11,200 soums, fish oil 400 ml - 28,000 soums, fluconazole 18 tablets - 21,600 soums and 640 ml of emulsion prepared from distilled water was 123,200 soums, 180 ml of Penstrep - 400 preparation was 135,000 soums. The total value of added costs (45000 soums+12600 soums+11200 soums+28000 soums+21600 soums+123200 soums+135000 soums) was 376600 soums.

Calculation of service costs of a veterinarian. One veterinarian worked 2 hours a day for a total of 18 hours for 9 days to treat a sick cow. The monthly salary of a veterinarian is 1,770,000 soums, taking into account that a person has 26 working days, one day's salary is 68,076 soums (1,770,000 : 26 days), and 3 days' salary (18 hours : 6 hours) is 204,228 (68,076 soums x 3 days)

soums. organized. Considering that the number of animals in the group is 5 heads, the cost of the veterinary doctor's service for one sick cow was 40845 (204228:5) soums.

So, $Q_{qvx}=376600 \text{ soums}+40845 \text{ soums}=417445 \text{ soums}$ (table 1).

Determination of Q_{qm} . The amount of milk obtained per day during the 9-day treatment experiment was on average 17.5 kg in the control group and 22 kg in the experimental group. during the experiment was 40.5 (4.5 kg x 9 days) kg, its value was 243000 (40.5 kg x 6000) soums. This difference during the next 30 days averaged 3 (22.7-19.7) kg per day, 90 (3 kg x 30 days) kg in 30 days, and its value was 540,000 (90 kg x 6,000 soums). So, the value of additional milk was 783000 (243000+540000) soums.

In addition, 4 out of 5 cows in the experimental group recovered within 9 days, and 1 out of 5 cows in the control group recovered. So, the profit received due to the additional recovery of 3 (4-1) heads of cows is 1129800 (376600 soums x 3 heads) soums due to the saved treatment means, 122535 (40845 soums x 3 head) due to the saved veterinary doctor's service. That is, the total value of the saved treatment means and the saved veterinary doctor's service due to the recovered cow was 1252335 (1129800+122535) soums.

So, Q_{qm} was 2035335 (783000+1252335) soums.

$S_v=Q_{qm} - Q_{qvx}=1617890(2035335-417445)$ soums.

Calculation of loss avoided (Q_{ooz}). The amount of additional milk obtained for one cow during one year (in 44 days) is 130.5 kg, 1305 kg for 10 cows. Its value is 7830000 (1305 kg x 6000 soums).

By saving the services of a veterinarian, the loss is 408450 (40845 soums x 10 head) soums, i.e. the total loss (Q_{ooz}) is 8238450 (7830000+408450) soums, the loss is 823845 (8238450 soums: 10 heads) for one cow. did

Cost recovery, i.e., the economic effect achieved at the cost of one soums spent was 3.9 (1617890: 417445) soums.

Therefore, the use of the improved method of treatment of endometritis in cows allows to prevent the economic damage of 823845 soums per head of milking cow, as well as to obtain economic benefits of 1617890 soums per head of milking cow in an average year, and the cost ratio is 3.9 soums.

SUMMARY

1. In the first group of animals with catarrhal endometritis, the treatment lasted an average of 8 days, in the second group, 10 days, and in the third group, 13 days, and in the first group of animals with purulent-catarrhal endometritis, the treatment lasted 9 days, in the second group, 11 days, and in the third group, 14 days. and in animals undergoing purulent-catarrhal endometritis of bacterial and fungal etiology, it lasted 11, 13 and 15 days, respectively.

2. Application of the improved method of treatment of endometritis in cows allows to prevent economic losses of 823845 soums per head of milk cow, as well as to obtain economic benefits of 1617890 soums per head of milk cow in an average year, and the cost recovery is 3.9 soums.

REFERENCES

1. Ата-Курбанов Ш.Б., Б.М.Эшбуриев. Ветеринария акушерлиги фанидан амалий – лаборатория машғулоти. Самарқанд, 2009. 236.б
2. Варава А. Е. Распространение послеродового эндометрита у коров хозяйствах Ростовской области / А. Е. Варава, Л. Г. Войтенко, Е. И. Нижельская О. С. Войтенко // Актуальные проблемы и методические отходы к диагностике, лечению и профилактике болезней животных: Материалы Всероссийской научно-практической конференции. – 2017. – С. 24-26.
3. Давлатов Р.Б., Норқобилов Б.Т., Қурбонов Ш.Х. Ветеринария ишени ташкил этиш ва иқтисоди. “Navro‘z nashiryoti” 2019, -Б. 176-193.
4. Копытин В.К., Василькова Ю.В. Профилактика и лечение акушерско-гинекологических заболеваний у коров // Теоретические и практические аспекты возникновения и развития болезней животных и защита их здоровья в современных условиях / Международная конференция, Воронеж, 3-4 октября 2000 г.- Материалы конференции.-Воронеж, 2000.- Том 1.- С. 168-169.
5. Черемисинов Г.А. Сравнительная эффективность комплексной этиопатогенетической терапии послеродового острого гнойно-катарального эндометрита у коров [Текст] / Г.А. Черемисинов, Ю.Г.Ткаченко // «Научные основы профилактики и лечения патологии воспроизводительной функции сельскохозяйственных животных»: Тез. докл. Всесоюз. научн. конф. - Воронеж, 1988. - С. 128-129.
6. Эшбуриев Б.М., Эшбуриев С.Б., Жуманов С.М. Veterinariya akusherligi fanidan amaliy-laboratoriya mashg‘ulotlari. Ўқув қўлланма. СамДУ тахририй-нашриёт бўлими. ISBN: 978-9943-6319-7-7. Самарқанд. 2020. 319 б.
7. Эшбуриев Б.М. Ветеринария акушерлиги. Дарслик.Тошкент. 2018. 511 б.
8. Шайхаманов М.Х. Определение экономической эффективности ветеринарных мероприятий // Метод. пос.-Москва, МВА. 1987.-48 с.
9. Kh, D. M., & Ruziyev, A. I. (2021). Treatment of suppurative inflammation of the finger joint in sport horses. *Academicia Globe: Inderscience Research*, 2(6), 355-359.
15. Pardaeva, S. A., Mirzaev, S. M., & Niyozov, H. B. (2023). Zotli sigirlarda aseptik pododermatit jarayonlarini uchrash darajasi. *golden brain*, 1(13), 4-9.
16. Ro‘ziboyev, A. K., & Kokilov, B. I. (2022). Otlarda bo‘g‘imlarning yiringli yallig‘lanishlarini zamonaviy usulda davolash. *agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali*, 356-363.
17. Niyozov, B. K., & Subukhov, M. (2021). Etiological factors, frequency of occurrence and pathomorphological indications for purulent inflammation of the joint of the fingers in sports horses. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(5), 238-244.