THE EFFECTIVENESS OF THE TREATMENT OF COWS WITH MASTITIS

Zainettinova D.B. [1], *Muhamadieva N.N.* [1], *Julanov M.N.* [2], *Stefanyk V.Yu*[3]., *Sarhambaeva I.A.*[1]

[1]Shakarim State University of Semey, Shugaeva Street 159, Kazakhstan, tnt_rani@mail.ru, nur71157@mail.ru
[2]Kazakh National Agrarian University, city of Almaty, Kazakhstan
[3]Stepan Gzhytskyi National University of Veterinary Medicine and Biotechnologies Lviv, Ukraine

The main sector of agriculture in Kazakhstan, including the East Kazakhstan region, is cattle breeding and, in particular, cattle breeding, which is determined by climatic and geographical conditions. However, successful reproduction and increase in livestock productivity is largely hampered by infertility and mastitis, and as a result they cause significant economic damage and reduce the reproduction rate and profitability of dairy cattle. Recently, the number of subclinical mastitis in cows has increased, which subsequently lead to profound morphological and functional changes in the mammary gland, a decrease in milk productivity and quality. Mastitis can be caused by various etiological factors, the main of which is microbial, primarily poor or inadequate feeding, poor care, improper maintenance and use of animals, negligent attitudes towards organizing and conducting artificial insemination, due to various diseases of the genital organs, which appear most often during childbirth and the postpartum period (I.G. Konopeltsev and V.N. Shulyatev, 2006; N.T. Klimov, 2008; M.S.Kondrashov and V.Yu. Stefanik, 2013; A.I. Kaldyrkaeva 2014; A. Lazarevich, 2015; N.N.Mukhamadieva et all., 2018).

The aim of this work was to study the therapeutic efficacy of applying of various treatment schemes for the cows with subclinical and clinical mastitis. 120 cows of the farms of "Balke", "Kalikhanuly" and "Madi-R" served as the research material, where we diagnosed subclinical form of mastitis in 53.2% and the clinical form in 11.8% of cases. Therefore, the study of specific causes contributing to the occurrence of mastitis, its diagnosis, treatment and prevention are of great practical importance. The diagnosis was established on the basis of the collection of anamnesis of clinical and laboratory research results. The quality control of the milk of cows was investigated by

Californian test and DEDM (Device for Express Diagnosis of Mastitis). The express diagnostic methods used by us allowed us to identify the subclinical and clinical forms of mastitis and timely treat it. Laboratory studies on the presence of somatic cells in milk were also conducted.

After the detection of breast diseases, complex symptomatic treatment was used. For the treatment of various forms of mastitis, drugs were used: Mastiet Forte - intracisternally for five days at a dose of 10 ml 2 times a day for five days in a row. Mastiet Forte has a high therapeutic efficacy in subclinical and clinical forms of cow mastitis. In addition, the drug ketoprof has also been used. Ketoprof as an anti-inflammatory agent was used intramuscularly - 3 ml per 100 kg of animal weight 1 time per day for 3 days in a row. As an antibacterial agent, was used Klineksin 5%, intramuscularly at a dose of 1 ml per 50 kg of body weight 1 time per day for 3 days in a row. Antimicrobial agents and biologically active substances needed to be combined for successful therapy. Such biologically active substances include vitamins, Helsivit. They were used subcutaneously - 6 ml once. In order to determine the therapeutic efficacy of the drug in three farms during the year, two research groups were formed: the first 64 cows sick with subclinical mastitis, the second 8 with catarrhal, and 7 with purulent-catarrhal mastitis.

For treatment, two schemes were used. For cows with catarrhal and purulent-catarrhal mastitis in the first scheme, Mastiet forte, ketoprof and vitamin Khelsivit were used. And cows with subclinical mastitis were treated with mastiet forte and clinex 5%, with vitamin Helsivit.

To determine the effectiveness of the applied treatment schemes for cows sick with various forms of mastitis 3-5 days after the start of treatment, laboratory studies were conducted by DEDM and the Californian test for the presence of somatic cells in milk.

In addition, laboratory studies were conducted for the presence of somatic cells in milk. So, at the beginning of the experiment their number was determined within 590 thousand - 620 thousand, and 3 days after the first treatment scheme, the number of somatic cells was within 480 thousand, and in the second treatment regimen 490 thousand somatic cells.

Thus, our research and complex treatment gave a very good result not only in the treatment of these cows, but also prophylactic effectiveness of the research carried out on the farms.