Thereby, the study has shown that the use of the antibiotic in doses below the minimum inhibitory dose stimulates the increase in Salmonella resistance in a short time.In this regard, it is extremely important to maintain the therapeutic concentration of the antibiotic throughout the treatment period, as its decrease leads to the resistant strainsformation, especially when bacteriostatic antibiotics are used.

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EXPERIENCE IN THE TREATMENT OF MASTITIS IN COWS IN THE TYUMEN REGION

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One of the main factors inhibiting the growth of milk productivity and worsening the sanitary quality of milk obtained at farms is pathological processes in the field of the mammary gland.

The most common pathology of the mammary gland is mastitis [2, 5]. Therefore, its treatment is an urgent problem at the level of many countries with developed cattle breeding [4.7].

Treatment is based mainly on the use of systemic and intracisternal antibiotics, increasing the overall resistance of the body.

The use of intra-tank antibiotics can prevent the development of a wide range of pathogens, but some have a narrow spectrum of action. In this regard, in the treatment of mastitis, several alternating treatment regimens are used [10].

In the conditions of the Tyumen region, the features of the application of the used treatment regimens for mastitis with the use of Cobactan 2.5% and Cobactan LC in dairy complexes will be considered.

For complex effects, most often veterinary specialists use different groups of active substances and different modes of administration, providing a larger-scale effect on the bacterial microflora.

The development of antibiotic resistance in bacterial forms of pathogens is also taken into account, which complicates the treatment and necessitates the use of “shock” doses or a combination of various drugs. Therefore, before treatment, the sensitivity of bacterial cultures to the active substance of the drug is determined.

A common drug in the treatment of mastitis is Cobactan 2.5% in various dosage forms [3, 6, 9]. The active substance - cefkinoma sulfate - has an antibacterial effect mainly against most gram-positive and gram-negative bacteria.

A feature of the structure of cefkinom, which determines its high efficiency, is the presence in the molecule of both negative and positive charges - zwitterion. The bipolar structure ensures rapid penetration of the drug through the outer membrane, which is especially important for gram-negative bacteria [8, 11]. Reaching high concentrations in the periplasmic space, due to its high affinity, cefkin quickly binds to penicillin-binding proteins on the surface of the inner membrane, which leads to a quick therapeutic effect. With a low affinity for b-lactamases, cefkin is highly resistant to their effects.

When administered by cefkin, it is slightly absorbed into the blood, providing high antibacterial concentrations in the tissues of the udder. It is worth noting that Cobactan LC is classified as a moderately hazardous

substance by its degree of exposure to the body. It's not recommended for use with other antibacterial agents, with bacteriostatic effect. Therefore, it is used exclusively in combination with the injection of Cobactan 2.5%.

The milk from the animal during the treatment period is not used for food purposes and in the next 4 days after the end of treatment. The slaughter of the animal is made not earlier than 48 hours after the last use of the drug.

To increase the effectiveness of antibiotics, the introduction of non-steroidal anti-inflammatory drugs is necessary.

The treatment regimen is based on the type of mastitis. With a clinically sluggish leaking mastitis, one quarter usually uses 1 syringe in the affected lobe with an interval of 12 hours at least 3 times [1]. In the chronic form - in addition to the introduction of Cobactan LC, an external treatment of the udder lobe with warming ointments is performed. In the acute form, treatment should be accompanied by injections of Cobactan 2.5% calculated on the weight of the animal.

Thus, it can be noted that such a drug as Cobactan 2.5% and Cobactan LC are universal antibiotic agents for the effective fight against mastitis in the economy of the Tyumen region.

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YOUNG SCIENTISTS OF THE VITEBSK STATE ACADEMY OF VETERINARY MEDICINE – TO SCIENCE AND NATIONAL DEVELOPMENT OF BELARUS

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Young scientists of today are a social group that is characterized by non-standard thinking, high educational level, initiativity, ability to quickly and effectively adapt to a market economy and wide spread of innovative technologies. An effective innovative activity of young scientists is a guarantee of sustainable development of nation. The Republic of Belarus pays special attention to the innovative findings of young researchers using new mechanisms for them to be involved into the development of scientific advances. However, requirements for the products of young researchers and innovators are rather high. Youth's innovative projects should be linked with the economical and industrial accomplishments of the country where they could find their implementation.

In the "Program for improving the scientific sphere of the Republic of Belarus" the University science is encouraged to develop fundamental and applied scientific research in advanced areas of science and technology; to improve scientific-methodological support of research work; to develop scientific- innovation activities [1].

Young scientists of the Vitebsk State Academy of Veterinary Medicine actively participate in research programs at both national and