

AUTOGENIC VACCINES ARE AN EFFECTIVE FOR CONTROL OF EPIZOOTIC PROCESS FOR MASTITIS IN COWS

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The main etiologic agent of cows mastitis is considered conditionally pathogenic microflora (streptococci, staphylococci, mycoplasmas) and their associations, which are usually activated under the influence of adverse animal retention factors. Prevention and treatment of mastitis is complicated by the prohibition of the use of a large number of antibacterial preparations. In recent years, in the scientific literature more and more messages appear on the successful use of autogenic vaccines to prevent mastitis. To study the effectiveness of the use of an experimental vaccine produced from autogenous strains in one of the dairy farms of the Lviv region.

Dairy farm has a herd of 600 dairy cows. For the bacteriological research samples of milk and the secretion of udder from cows with clinical and subclinical forms of mastitis the content of the uterus from cows with postpartum endometritis and specimens of faeces from newborn calves suffering from diarrhea were selected. From the 12 biomaterials, 20 isolates were isolated and identified, including *E. coli* — 9, *Str. pneumoniae* — 4, *Str. dysagalactiae* — 3, *St. aureus* and *St. intermedius* — for 2 isolates.

The analysis of the dynamics of titer of agglutinins in serum of blood of cows vaccinated with vaccine from autogenous strains, shows that the highest antigenic activity possessed by the *E. coli* immunogen (1: 2048 — mean titers in cows before calving and 1: 448 — in 2 months after the calving), lower — immunogens *Str. pneumoniae* i *Str. Dysagalactiae* (1:448, 1:256 — middle titer before calving and 1:96, 1:64 2 months after calving), and the lowest — immunogens *S. aureus* i *S. Intermedius* (1:112, 1:64 — middle titer before calving and 1:32, 1:28 in 2 months after calving). This indicates a high immune response of vaccinated animals, which had expressed projective effect as indicated by the data of the analysis of the zootechnical and economic parameters of the farm before and after applying the vaccine. Thus, the morbidity of cows for subclinical mastitis decreased 5 times, clinical — 6 times, on endometritis — 6 times, and the incidence of newborn calves by gastrointestinal diseases — 8 times.

Thus, the use of autogenic vaccines is effective, and therefore, a perspective direction for the prevention of diseases of cows mastitis is associated with this pathology.

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