COMPARATIVE ASSESSMENT OF ANTIGENITY AUTOGENIC VACCINE AGAINST SALMONELOSIS TELL In RA and RNGA

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The outbreak of salmonella was observed in calves aged 25-30 days; sick 9, died 3 calves; the incubation period lasted 1-3 days, and the course of the disease - from several days to a week. Diagnosis of the disease was carried out in a complex manner using classical methods and using modern environments and approaches.

Bacteriological studies of feces from 9 clinically ill calves and pathological material from 3 calves were identified and identified 2 types of salmonella - Salmonella typhimurium and S. dublin. Typization of isolated isolates was carried out according to morphological characteristics, tinctorial, culture and biochemical properties. Both strains were virulent for white mice at a dose of 0.2 cm3 for subcutaneous administration of a suspension (1:10) of pathological material; the death occurred in 36 years. (S. dublin) and 58 h. (S. typhimurium).

For a specific prophylaxis of salmonellosis, two experimental series of Salmonella vaccine series, which were made by us from isolated salmonella strains, were used: vaccine No. 1 was concentrated with aluminum hydroxide; Vaccine № 2 - concentrated with aerosil A-300; The concentration of each immunogen in both series of vaccines was 5×10^9 m.t. / cm3. Both vaccines were inactivated by formalin and emulsified. In order to determine the tension of humoral immunity to the antigens of the vaccine strains of salmonella, we examined the blood serum of vaccinated cows and calves. The blood was taken for examination on the 14th day after the re-administration of the vaccine. Blood serum levels of antibodies in RA were determined for monoantigens of Dublin and Typhimurium and in RNGAs with

erythrocytic diagnostic kills that were sensitized with soluble antigens S. dublin and S. typhimurium.

It should be noted that the titers of antibodies to monoantigens, typhimurium, both in RA and in RNAA, were higher compared to those of Dublin's monoantigens. This difference, in our opinion, is due to the difference in the surface structure of the antigenic determinants of both strains, but not to their exotoxins, because during the manufacture of monodiagnostic tumors for RA and RNGA suspensions of microbial cells of strains of salmonella strains we were repeatedly washed with phosphate-salt buffer. In our opinion, this undermined the influence of exotoxins on the manifestation of both reactions.

And to the very end, there is a very pronounced difference in the sensitivity between the two reactions - the titres of antibodies in the RNAA in 3 and more times are higher than in RA. At the same time, this difference in the sensitivity of reactions manifests itself both in the results of the study of serum from both cows and calves.

Taking into account that there was a close correlation between the levels of antibodies to the monoantigens of Tifimurium and Dublin, which we detected with the help of RA, and to mono-diagnostics of the working strains of salmonella in RNGA, ($\rho > 0,9$), we believe that RNGA can be with success and greater oversight to apply to assess the tension of humoral immunity by the level of post-vaccine antibodies in serum.

Conclusions:

1. The isolation and identification of two Salmonella enterica subspecies (Typhimurium and Dublin) shows the possibility of simultaneously circulating two types of salmonella in one epizootic center. 2. To detect levels of humoral antibodies in the blood serum of vaccinated against salmonellosis in animals, RNGA was found to be significantly more sensitive than RA, and therefore it is a highly sensitive test for assessing the antigenicity of salmonella vaccines and a promising laboratory method for controlling the epizootic process for animal salmonellosis. 3. The application of two experimental series of vaccine (emulsified inactivated and concentrated hydroxides with aluminum (№1) and aerosil A-300 (№2), in which both antagonists used anatoxins and corpuscular antigens of two autogenic strains of salmonella, made it possible to effectively eliminate an outbreak Salmonella infection of calves.