



INDICATORS OF AGLUTINATION REACTION IN POLYVALENT SERUM OF INTESTINAL YERSINIOSIS IN THE IMMUNISATION STAGES

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<https://doi.org/10.5281/zenodo.10780875>

Annotation. When analyzing the dynamics of agglutination reaction indicators at the stages of immunization with sera of polyvalent intestinal yersiniosis obtained from experimental animals, it was found that from the 7th day of immunization, antibodies appeared in experimental animals and over time in all groups the antibody titer was increased, and at the stages of immunization in experimental animals which were immunized with corpuscular cells of *Yersinia enterocolitica* serovar O9, the antibody titer was high.

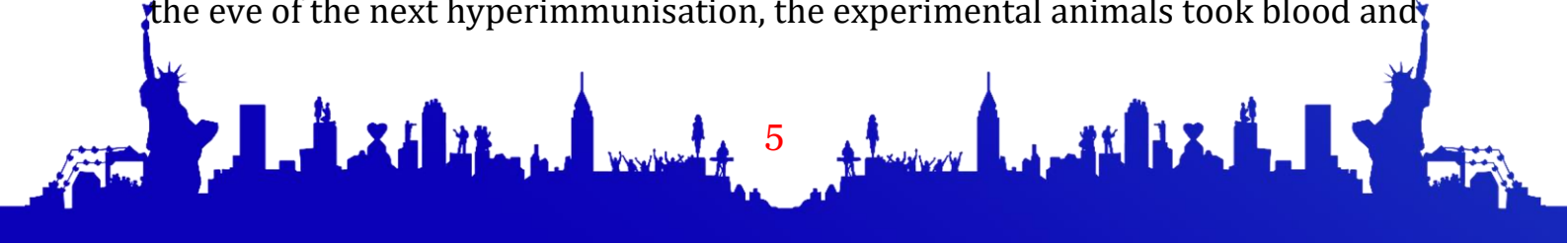
Key words: intestinal yersiniosis, *Yersinia enterocolitica*, agglutination reaction, antibody.

The purpose of the study is to study the dynamics of agglutination reaction indicators at the immunisation stages of polyvalent diagnostic serums of intestinal yersiniosis obtained from experimental animals (rabbits).

Yersinia enterocolitica number 005011/659 O3. Was used as the study material O9 № 005008/656 and blood serum of experimental animals were used[1].

Experimental animals were kept in quarantine for 21 days. The rabbits were divided into 4 groups. 3 rabbits were taken into each group: 12 rabbits in 4 groups were injected at only 8 points (points 1-4, two sides of the spine under the skin, points 5-8, one third of the thigh of the internal muscles) from 0.2 ml to a total of 1.6 ml, per hour at a temperature of 60C, in a water bath of inactivated corpuscular and corpuscular microbe prepared by freezing 5 times -20C and re-thawing soluble antigens (separately and in combination).

Before starting the experiment, the experimental animals took blood and were hyperimmunised 5 times. Immunisation was carried out every 7 days. On the eve of the next hyperimmunisation, the experimental animals took blood and





examined the blood serum by agglutination reaction on the object glass and test tubes[2].

A bank of hyperimmune rabbit serums against intestinal yersiniosis pathogens (72 variant samples) has been created: pre-immunisation, 1-5 post-immunisation serums. Before starting the experiment, the experimental animals took blood and were hyperimmunised 5 times. Immunisation was carried out every 7 days. On the eve of the next hyperimmunisation, the experimental animals took blood and examined the blood serum by agglutination reaction on the object glass and test tubes.

A bank of hyperimmune rabbit serums against intestinal yersiniosis pathogens (72 variant samples) has been created: pre-immunisation, 1-5 post-immunisation serums. To each first immunisation, a soluble antigen with inactivated corpuscular cells of *Yersinia enterocolitica* 00508/656 09, 4 billion antigen in a concentration of 4 billion for the second immunisation, soluble antigen was added, soluble and corpuscular antigen was added during the third immunisation, 16 billion, soluble and corpuscular antigen was added to the fourth immunisation, 20 billion and 25 billion to the fifth immunisation, experimental animals (rabbits) of the 4th group were injected soluble antigen in the concentration on the 7th and 14th days of immunisation there was a weakly positive result for the agglutination reaction in the subject glass.

On the 28th day of immunisation, the blood serum of experimental animals of the 2nd, 3rd and 4th groups was tested with the help of an agglutination reaction on the object glass was positive, and a super-positive result was recorded in the blood serum of animals of group 1. On the 35th day of immunisation, that is, on the fifth antigen vaccination, all results were super-positive.

On the 28th day of immunisation (4th vaccination), on the 35th day (5th vaccination) in blood serums obtained in test tubes, average titres were observed from 1:133 (2nd group) to 1:11733 (group 3rd group).

When the dynamics of agglutination reaction indicators at the stages of immunisation with polyvalent intestinal yersiniosis serums from experimental animals was analysed, it was found that from the 7th day of immunisation, antibodies appeared in experimental animals, and in the dynamics of the antibody titre increased in all groups, in experimental animals, where serovar 09 from *Yersinia enterocolitica* was inactivated, antibodies[3].





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