Results of experimental estimation of protection activity of BAE Synergy Liquid on experimental model of anthrax

Edward Krizhanovsky, PhD, Kirlionics Technology International, Saint-Petersburg,

Russia Marina Borisov, PhD, Research Institute of Chemistry, named after Mendeleev, Saint-Petersburg, Russia

Saint-Petersburg, May, 2005

1. Materials and methods

- 1.1. The object of study was BAE Synergy Liquid (SL), which was added to drinking water at 1/100 proportion (BAE SL solution). BAE SL solution was given to experimental animals during 1 month before infection.
- 1.2. For modeling of anthrax infection the culture 71/12 of second Cenkovsky vaccine was used. The agent culture was cultivated on casein agar under 37°C during 2 days. The contaminating dose consisted 150.
- 1.3. The study of effectiveness of preparation BAE SL solution regarding to anthrax was conducted on white outbred mouse-males with 18-20 gram of mass, obtained from "Rappolovo" nursery of Russian Academy of Medical Sciences. The experiment was conducted on the animals, which were in quarantine during 1 week. Animals were divided into 2 groups: experimental (they were used preparation BAE SL solution) and control (they were used only drinking water). The crew size of experimental group consists 39 mouses, control group 40 mouses.
- 1.4. Protective effectiveness of preparation BAE SL solution was estimated by way of comparison of survivability of animals in experimental and control groups.

2. Experimental results

Results, characterized effectiveness of preparation BAE SL solution, which was used before infection, presented at Figures 1 and 2.

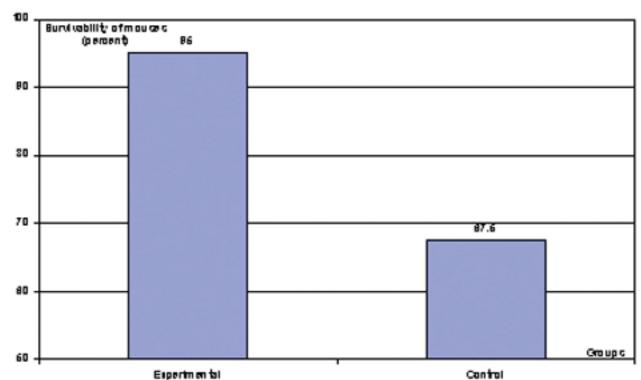


Fig. 1. Protective effectiveness of preparation BAE SL solution in respect to experimental anthrax infection under preventive (prophylactic) using during 1 month before infection.

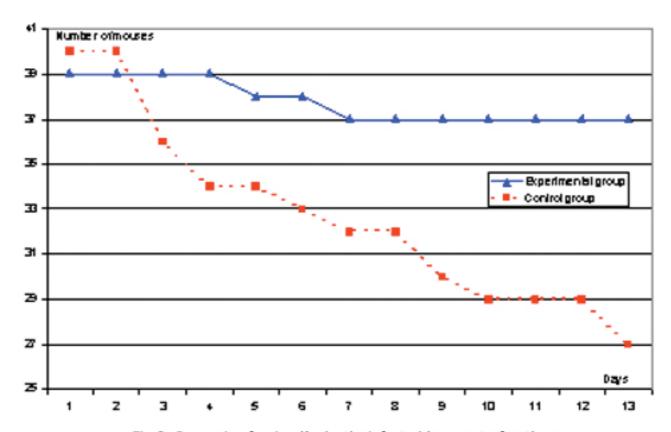


Fig. 2. Dynamic of animal's death, infected by agent of anthrax.

3. Conclusions

How it follows from the results presented at Figures 1 and 2, prophylactic using of preparation BAE SL solution assist to increasing of steadiness of experimental animals to anthrax infection. In experimental group the death rate was only 5% (2 mouses from 39), and 32,5% (13 from 40) in control group.

Therefore, conducted study gave opportunity to reveal ability of preparation BAE SL solution to increase steadiness of organism to anthrax infection, which argues perceptivity of farther investigation of preparation.