EFFECT OF CW-BOS-122 ON THE MODEL OF PULMONARY THROMBOSIS IN MICE

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Relevance

Currently, blood clots in the arteries, veins, and cavities of the heart and their embolism in various organs are the cause of myocardial infarction, stroke, and pulmonary embolism [1, 2, 3, 4]. Blood clots and thromboembolism cause the death of almost 25 million people every year, and many millions of people become disabled [5].

Investigation of the effect of CW - BOS-122 compounds on the model of pulmonary thrombosis in mice.

Research materials and methods

The Di Minno G pulmonary thrombosis model is used to test potential antithrombotic agents primarily acting on platelet aggregation. The direct cause of death of animals is massive occlusion of the micro vessels of the lungs by platelet aggregates.

This model is created on white mongrel mice of both sexes with a body weight of 20±2 g. As a thrombotic agent, a mixture of collagen solutions (0.5 mg/kg) and epinephrine (0.06 mg/kg) is used, which was injected into the tail vein of the animal?

For the study, the following were provided: the compound SC-BOS-122 and the comparison drug Aspirin manufacturer (Borisov Plant of Medical Preparations) 20 mg / kg were administered personally.

The studied drugs were re-administered for two days, and on the third day, the thrombotic agent was immediately administered intravenously. The control group of animals received the solvent in the same volume.

As a criterion for the formation of blood clots, the number of dead animals is recorded, and macroscopic examination of the lungs of dead and surviving mice a day after the introduction of the thrombotic agent and the studied drugs.

Results:

As can be seen after the introduction of the thrombolytic agent in the control group of animals against the background of the solvent, 8 mice out of 10 or 80% died. When Aspirin was administered at a dose of 20 mg / kg, 2 out of 10 or 20% of the animals died. When the compound CW-BOS-122 was administered, 1 in 10 mice died, 10%.

Conclusions:

The results obtained allow us to conclude that the compound C-BOS-122, as well as the drug Aspirin administered immediately after the thrombotic agent, prevented the death of animals, i.e., has an antithrombotic effect.

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