



Study of the effect of ascorbic acid on the blood coagulation system of white laboratory rats

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Abstract

The problem of impaired blood coagulation is very urgent, despite the emergence of new diagnostic methods, drugs and treatment regimens for patients. Hemostasis ensures the preservation of blood in the bloodstream in a liquid state of aggregation, stopping bleeding in case of damage to the blood vessels. Changes in the hemostatic system can cause the development of hemorrhagic, thrombotic conditions. This paper examines the effect of the vitamin ascorbic acid on the blood coagulation system. For the study of ascorbic acid, animals were selected in the amount of 8 units of one weight and one sex. The animals of the control group were injected with water for injection (0.5 ml/kg), the animals of the experimental group were injected with ascorbic acid (44 mg/kg). Injections were carried out every day, after the introduction of vitamins, the animals were observed for 2 hours. The effect on the coagulation system was considered according to four indicators: activated partial prothrombin time (APTT), prothrombin time, prothrombin ratio and fibrinogen concentration. To calculate the data, the method of variation statistics was used for small series of observations. As a result of the experiment, a unidirectional effect on the coagulation system of ascorbic acid was observed, which led to an increase in the concentration of fibrinogen in plasma. On the basis of the data obtained, it was established that ascorbic acid has a positive effect on the coagulation system, the expediency of using the described vitamin in complex therapy, as well as the correction of hemostasis disorders, was established.

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