

A STUDY IN CHINOLINE AMERIDIN EFFECT ON LYMPH SYSTEM COAGULATION ACTIVITY UNDER CARDIAC INFARCTION

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Violation of lymph outflow from cardiac muscle damage area leads to development of interstitial edema, aggravates microcirculation disturbance in coronary vessel obliteration area.

The object of work is to study the effect of chinoline ameridin (derivative of carboxylic acids) on lymph circulation wrapping activity and lymph drainage function of cardiac muscle under acute cardiac infarction.

Research material and methods Experiments were performed on 35 rats with weight of 180 – 200 g. In 5 rats the lymph coagulation condition and lymph outflow rate (lymphorrhagic syndrome) was studied in intact condition.

In the rest of animals acute cardiac infarction was imitated by tying upper third of anterior interventricular artery. The dynamics of acute cardiac infarction progress was monitored by ECG registration and determination of creatine phosphokinase (CPK) in blood serum by spectrophotometry using Chemaol standard reagent set. The blood was taken from auricular limbic vein. ECG was registered in intact condition and within 25 days, CPK at the beginning of experiment as well as within 6 days after imitation of infarction.

Results and discussion In animals of Group 2 after administration of ameridin substance the course of infarction was more favorable. Alterations of lymph coagulation were marked by reduction of heparin tolerance by 58%, more than 1.5 times decrease of prothrombin index as compared with control group, substantial increase of heparins and thrombin time (218 and 221% respectively), fibrinogen concentration was reduced 2.5 times. Lymph outflow velocity increased more than 4 times as compared with controls (0.132 ± 0.016 mL / min) which was indicative of intensified lymph drainage, thus, better removal of cardiac metabolism toxic products.

Conclusion It must be noted that within the following periods of study heparin and thrombin time values were higher than initial ones, whereas prothrombin index and fibrinogen concentration remained reduced up to the end of observation. Consequently, we may state that chinoline ameridin administration has an expressed hypocoagulation effect and stimulated lymph anti-coagulation activity.

Chinoline ameridin showed an expressed hypocoagulation effect in experiment as well as assisted in acceleration of cardiac lymph draining function.

CYTOGENETIC AND MOLECULAR DIAGNOSTIC OF MARRIED COUPLES WITH DISORDERS OF REPRODUCTIVE FUNCTION

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Introduction. In the modern world, the problem of infertility is considered one of the most important medical and social problems. The relevance of diagnosis, treatment and prevention of infertile marriage is associated with a significant prevalence of this pathology in Ukraine and a tendency to increase throughout the world. According to dates of WHO, 15% of married couples (60-80 million) in the world are infertile; pregnancy occurs in natural conditions, but ends with a born dead in 10 % of cases, and in 10-25 % of couples experiencing secondary infertility.

Aim. To explore the possibility and effectiveness of cytogenetic – molecular research methods for the diagnosis of chromosomal pathologies in couples with disorders of reproductive function.

Materials and methods. Cytogenetic, genetic, statistic and polymerase chain reaction method in real time.