THE EFFECT OF POLYDICHLORIDE ON THE COAGULATION ACTIVITY OF THE LYMPHATIC SYSTEM IN CARDIAC INFARCTION IN PATIENTS WITH TYPE 2 DIABETES

Marchenko E. O., Karabut L. V. Scientific supervisor: prof. Berezniakova M. E. National University of Pharmacy, Kharkiv, Ukraine klinlab@nuph.edu.ua

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

The **aim** of work is to study the effect of polidichlozine (dinoline derivative of carboxylic acids) on lymph circulation wrapping activity and lymph drainage function of cardiac muscle under acute cardiac infarction on the background of diabetes.

Materials and methods Experiments were performed on 25 rats with weight of 180–200 g. In 5 rats the lymph coagulation condition and lymph outflow rate (lymphorragic 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 Chemaiol 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 9 days after imitation of infarction.

Results and discussion. In animals of Group 2 after administration of polidichlozine substance the course of infarction was more favorable. Alterations of lymph coagulation were marked by reduction of heparin tolerance by 71%, more than 1.8 times decrease of prothrombin index as compared with control group, substantial increase of heparins and thrombin time (219 and 235% respectively), fibrinogen concentration was reduced 1.5 times. Lymph outflow velocity increased more than 3 times as compared with controls $(0.127 \pm 0.021 \text{mL} / \text{min})$ 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 polidichlozine administration has an expressed hypocoagulation effect and stimulated lymph anti-coagulation activity. Polidichlozine showed an expressed hypocoagulation effect in experiment as well as assisted in acceleration of cardiac lymph draining function on the background of diabetes.

CHANGES IN HORMONAL STATUS IN WOMEN WITH A PATHOLOGICAL MENOPAUSE

Palamarchuk O., Inzhevatova V. National University of Pharmacy, Kharkiv, Ukraine palamarchuk_xena@ukr.net

Introduction. In connection with the increase in the life expectancy of women, the growth of their social activity, the problem of pathological climax has not only medical but also social significance. Climacteric syndrome (CS) is a complex of symptoms that complicates the natural course of climacteric syndrome, and is neuropsychiatric, vasomotor, urogenital, hormonal and metabolic disorders.

The **aim** of the study. Find out what changes are hormonal in women with a pathological menopause.

Materials and methods. 50 women who were in the menopausal period were screened. Of these, 30 (60%) of women with a pathological menopause formed the main group; 20 (40%) women with a physiological menopause - a comparison group. Each group was divided into subgroups, depending on whether they were in pre- or postmenopausal period. All women had a clinical and laboratory examination. Complaints, anamnesis, clinical tests of blood, urine, coagulogram, blood sugar and urine contents, RW, ultrasound examination of internal genital organs, ECG were performed). In addition, the concentrations of hormones: gonadotropic (FSH, LH), TTG, steroid (estradiol, progesterone, cortisol), as well as β-endorphin in blood serum were determined. The concentration of FSH, LH, estradiol, and progesterone in serum was determined by the radioimmune method. In assessing the gravity of the CS, the scale of S. Heifetz (1981),