МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

105-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
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Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

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У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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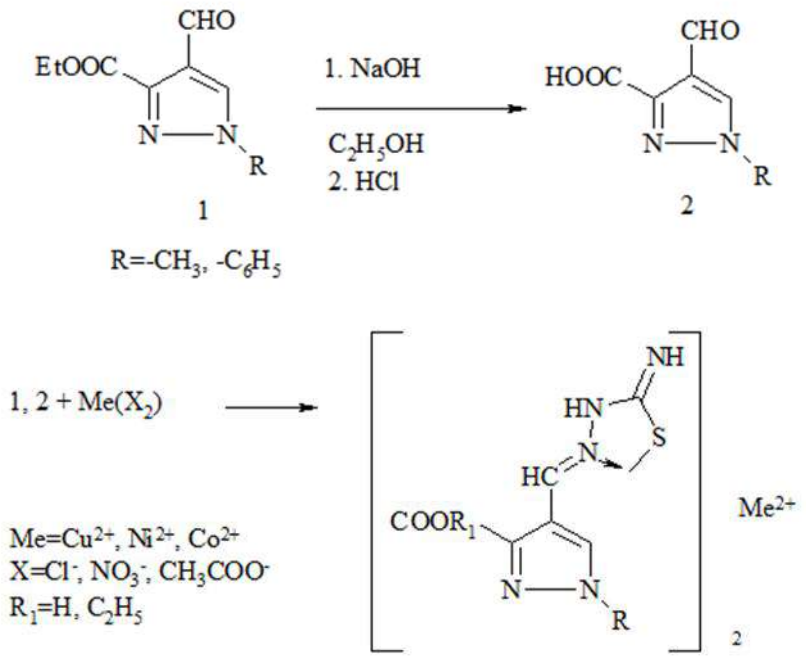

Results. The composition and structure of the intermediate and target compounds was confirmed by elemental analysis data and chromato-mass, ^{1}H NMR spectra.

Conclusions. On the basis of ethyl esters of 4-formyl-3-pyrazolylcarboxylic acids, thiosemicarbazones were synthesized and to study their complexing ability with Cu^{2+}, Ni^{2+}, Co^{2+} salts. Research on antimicrobial activity will be conducted.

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CHARACTERISTICS OF THE BLOOD PLASMA COAGULATION SYSTEM INDICATORS IN PATIENTS WITH GENITAL ENDOMETRIOSIS

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Introduction. In this work, we have conducted the analysis of indicators of the blood coagulation system, which characterize the internal APTT(Activated Partial Thromboplastin Time) and external coagulation pathway PT (Prothrombin Time) for 38 patients within the age range of 25-37 years old with genital endometriosis who do not have pathologies of the hemostasis system. According to statistics, endometriosis affects 10% of women of reproductive age. This chronic disease causes an inflammatory process with various types of damage. The final causes of the development of the disease are not known, but a number of genetic factors, hormonal imbalance (especially estrogen), dysfunction of the immune system, and even ethnicity contribute to its spread.

The aim of the study. To compare the parameters of blood plasma coagulation system (APTT, PT) of women within the reproductive age range of 25-37 years old with chronic endometriosis with the blood parameters of healthy women of a similar age in the control group. INR and APTT coefficients were used to standardize indicators.

Materials and methods. Venous blood sampling of the patients was performed on an empty stomach from the ulnar vein. As an anticoagulant, 3.2% (109 mmol/L) trisodium citrate was used in a ratio of 1:9 to the volume of whole blood. Platelet-poor plasma was obtained by centrifugation at 2000 rev/min for 10 min. The resulting plasma was stable at room temperature for up to four hours.

Determination of APTT and RT was carried out on a two-channel semi-automatic coagulometer DIAGON COAG-2D using diagnostic kits: DIA-PTT LIQUAD and DIA-PT. Control plasmas DIA-CONT I-II (No. 910436) were used for control, respectively, with normal (I) and hypocoagulable (II) data. According to the analyzer program

Dia-PTT LiQuid test results can be reported in the following units: - seconds, which means the observed clotting time; - ratio (APTT/MNPTT), which means the clotting time of the sample divided by the mean normal APTT (MNPTT)

Dia-PT test results were reported in the following units: - seconds, which means the observed clotting time; - percentage, which means the proportional part of the normal PT activity, which is calculable from the calibration curve; - INR which means the ratio raised to the power of International Sensitivity Index (ISI).

$INR = (PT/MNPT)^{ISI}$. MNPT means normal prothrombin time.

The INR is only officially recognized dimension of the result at vit. K antagonists treated patients. The normal range expressed in INR is 0.8-1.2. Reference ranges are following on Diagon analyzers (Coag Line).

Non-parametric methods were used for statistical calculation and comparison of results between two groups: Wilkinson-Mann-Whitney and Kruskal-Wallis criteria. The influence of a factor on a sign was detected by Kruskal-Wallis criterion. The results were considered reliable with $p > 0.05$.

Results. The main results of the research are presented in the table.

Table.

Comparative analysis of indicators of the blood plasma coagulation system of patients with endometriosis with similar indicators of the control (healthy) group (M ± m)

The research group	PT_{sec} (M ±m)	$APTT_{sec}$ (M ±m)	INR_{ratio} (M ± m)	index APTT
Patients with endometriosis (n=38)	14.60 ± 1.53*	32.50 ± 3.12	1.21 ±0.08*	1.18 ± 0.07
Control group (n=23)	12.82 ± 0.95	30.42 ± 2.57	1.05 ±0.06	1.12 ± 0.06

Note: *- the groups differ reliable.

Conclusions. When comparing indicators of the coagulation and homeostasis' system between a group of healthy women and a group of patients with endometriosis, a probable decrease in PT and INR was noted in patients with endometriosis. No significant difference in APTT was noted.

Davydova N.V.

THE STATE OF ANTIOXIDANT SYSTEM IN RATS' KIDNEYS UNDER ALCOHOLIC INTOXICATION AND ITS COMBINATION WITH LIGHT EXPOSURE

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Introduction. Although the negative effects of excessive alcohol consumption are generally known in the human population, drinking alcoholic beverages is prevalent in society. According to WHO, alcohol abuse contributes to three million deaths per year globally and millions of people's disabilities and organ damage.

In modern life, the use of ethanol is often combined with the influence of other harmful factors, such as the violation of the light regime. A modern person is exposed to light almost all the time. Night shifts, flights, jet lag, and active nightlife contribute to the disturbance of circadian rhythms. Normally, the biological rhythms are regulated by melatonin, which is known to be secreted in the dark. Even a slight lighting inhibits its synthesis. It has been shown that melatonin has a wide range of biological effects, but its main feature is a powerful antioxidant action.

The aim of the study. To investigate the effects of melatonin on antioxidant enzymes activity (catalase and glutathione peroxidase) in the kidneys of rats exposed to alcohol intoxication and its combination with constant light exposure.

Material and methods. Subacute alcohol intoxication was induced by intragastric administration of 40% ethanol in a dose of 7 ml/kg of body weight for 7 days. Light exposure was caused by keeping animals under a fluorescent light of 1500 lux intensity for 24 hours a day.

Results. Alcohol intoxication was accompanied by a decrease of catalase activity in rats' kidneys by 21% below the control level along with a decrease of glutathione peroxidase activity by