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ЗАПОРІЗЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ

МАТЕРІАЛИ

ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ З МІЖНАРОДНОЮ УЧАСТЮ

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involved in the process of hydrazinolysis in an alcoholic medium. The obtained reaction product was used in the reaction with 4-chlorophenylisothiocyanate, which was previously synthesized. The isolated *N*-(4-chlorophenyl)-2-(pyrrole-2-carbonyl)hydrazine-1-carbothioamide was subjected to intramolecular heterocyclization in an alkaline medium at the next stage.

The synthesized 4-(4-chlorophenyl)-5-(pyrrol-2-yl)-1,2,4-triazol-3-thiol was used in alkylation reactions with haloalkanes in order to further establish the biological potential of the synthesized series of substances.

The structure of the synthesized substances was confirmed using modern physicochemical methods of analysis.

The next phase of research was related to computer chemistry methods. Thus, the PASS On-line web resource was involved in the research work, which made it possible to determine the nature of biotargets for molecular docking.

Thus, models of cyclooxygenase-2 and lanosterol-14α-demethylase, which were downloaded from the Protein Database, were used for docking studies. Research at this stage was carried out using a package of programs, including AutoDock 4.2.6. At the first stage, the preparation of ligand molecules was carried out, which included the use of Open Babel 3.1.1 and MGL Tools-1.5.6. Next, the preparation of the receptor molecule was performed, which was based on the use of BIOVIA and MGL Tools programs. Then maps were reproduced to implement docking. Here again MGL Tools and AUTOGRID were involved. Further work was related to the AutoDock program. The obtained results were evaluated using qualitative and quantitative parameters.

The conducted studies made it possible to preliminarily determine the possible directions of further research of pharmacological properties.

THE EFFECTS OF UMBILICAL CORD STEM CELLS CONDITIONED MEDIUM, HYALURONIC ACID AND UMBILICAL CORD EXTRACT ON FIBROBLASTS CULTURE AND SKIN OF OVARIECTOMIZED RATS

Prokopiuk V.Yu.[1,2,*], Shevchenko N.O.[3], Shevchenko M.V.[4], Prokopiuk O.S. [5], Kaverynska A.I.[6], Falko O.V.[7], Volina V.V.[8]

[1,3,4,5,6,7,8]Institute of Problems of Cryobiology and Cryomedicine of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine

[2] Kharkiv National Medical University, Kharkiv, Ukraine

v.yu.prokopiuk@gmail.com[1,2,3,4.5.6.7,8]

Introduction. The desire to look younger at any age leads to the demand for technologies to restore the skin and prevent age-related changes [5]. Promising modern methods of skin restoration are the application of hyaluronic acid and cell therapy [1, 3]. Cryoextract of the umbilical cord, umbilical cord stem cells conditioned medium, which contains both components [4], may be effective in the treatment of age-related skin changes.

The aim of the work was to compare the effect of umbilical cord mesenchymal stem cells culture medium, hyaluronic acid and umbilical cord extract on fibroblasts cell culture and the skin of ovariectomized rats.

Materials and methods. The umbilical cord was obtained after a caesarean section after the informed consent of the women. The extract was obtained by freezing and centrifugation, the cells were isolated by the enzymatic method, the conditioned media was obtained after culturing for 24 hours [2]. Fibroblasts were isolated from mice embryos skin, 3 passage was used [2]. Investigated substances were added for 24 hours to the culture medium. Adhesion, proliferation, metabolic activity, monolayer morphology were assessed. The investigated substances were injected intradermally into ovariectomized rats. Histological examination of rat skin fragments was carried out after 2 and 4 weeks.

Results and discussion. It has been demonstrated that cryoextract of umbilical cord and conditioned medium increases the metabolic, proliferative and migratory activity of fibroblasts in the in vitro system. The action of the umbilical cord cryoextract on the cell culture is similar to the effect of the culture medium of the umbilical cord stem cells, while it does not reduce the proliferative activity and adhesion of the cells, as hyaluronic acid does.

Intradermal application of cryopreserved umbilical cord extract in ovariectomized rats leads to systemic recovery of aging manifestations: the epidermis and dermis thicken, cell proliferation phenomena are observed, the number of blood vessels and skin elements increases.

Conclusions. Umbilical cord stem cells conditioned medium and the cryoextract of the umbilical cord are promising for application in antiaging therapy.

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RESULTS OF FREQUENCY ANALYSIS OF DRUG PRESCRIPTIONS BREAST CANCER PATIENTS

Rafalska Y.[1], Kosyachenko K.[2]

[1,2]Bogomolet`s National Medical University, Kyiv, Ukraine

yaroslava.rafalska@nmu.ua[1,2]

Introduction. Today, one of the global problems in the world and in Ukraine is the constant increase in cases of breast cancer in women. As a result, economic costs and the burden on the health care system increase, which leads to the need for rational use of financial resources. Various analysis methods are used to solve this problem, such as frequency analysis, VEN analysis and ABC analysis.

Materials and methods. 415 cards of women with breast cancer who were undergoing inpatient treatment were analyzed. The method of frequency analysis of drug prescriptions and generalization of results was used.

Results and discussion. With the help of frequency analysis, the total and average number of prescriptions, the total and relative number of prescribed drugs (drugs) were determined, and their distribution by ATS classification groups was carried out. It was established that, on average, the patients of the analyzed sample spent 9 bed-days in the hospital. During this time, a total of 3,723 appointments were made to them. Based on the data obtained from the analysis of prescription letters, 142 trade names of drugs representing 11 pharmacotherapeutic groups were prescribed to patients with breast cancer.

It was found that the largest number of prescriptions, namely 1055 (or 28.32% of the total number of prescriptions), falls on drugs of group B – drugs that affect the blood system and hematopoiesis, and the smallest number is observed in group V – various drugs – 10 (0.27%).

The dispensation of pharmaceuticals by international non-proprietary names belonging to group B – agents affecting the blood system and hematopoiesis was carried out. It was established that among