

# ABSTRACT BOOK

## 8<sup>th</sup> International Scientific Interdisciplinary Conference for medical students and young scientists



<http://isic.kharkov.ua>

Kharkiv National Medical University, Kharkiv, Ukraine

May 14<sup>th</sup> - 15<sup>th</sup>, 2015

MINISTRY OF HEALTH OF UKRAINE  
KHARKIV NATIONAL MEDICAL UNIVERSITY

# Abstract book

of

8<sup>th</sup> International Scientific  
Interdisciplinary Conference  
for medical students and young scientists

Kharkiv, May 14<sup>th</sup> - 15<sup>th</sup> 2015



Dyadichev A.V.....	16
MELANOMA.....	16
Dyadichev O. V., Grabovetskaya E.R.....	18
FROM MACRO- TO MICROCRYSTALS.....	18
Ejagwulu Elizabeth, Shaposhnikova Yu., Nemtsova V.....	19
LATEST EVIDENCE ON GOUT DIAGNOSIS, MANAGEMENT AND PREVENTION; WHAT THE CLINICIAN NEEDS TO KNOW.....	19
Fed'ko K.O.....	20
MORPHOLOGICAL FEATURES OF THALAMIC VENTRAL NUCLEAR GROUP OF HUMAN'S DIENCEPHALON.....	20
Galata D.I., Potapov S.N.....	20
BONE MARROW MORPHOFUNCTIONAL PECULIARITIES IN FULL-TERM FETUSES AND NEWBORNS FROM MOTHERS WITH MIDDLE-GRADE PREECLAMPSIA SEVERITY.....	20
Gordiychuk Dariya A., Ahmed Raliat B., Salawu Khairat T.....	21
ACETYLCYSTEINE AS AN IMPORTANT PANACEA.....	21
Gordiychuk D.A., Dan'azumi Ibrahim A.....	22
ACETYLCYSTEINE PERIODONTOPROTECTIVE AGENT IN CHRONIC GENERALIZED PERIODONTITIS.....	22
Gordiychuk D.A., Ohiri Akuyoma M., Fom Mildred N.....	23
THE WORLD'S MOST DANGEROUS DRUG.....	23
Gubin N., Shmatko K., Gaynanova V.....	24
FORENSIC MEDICAL DIAGNOSTICS OF LETHAL DAMAGES IN CASES OF BODY FALL FROM GREAT HEIGHT INTO THE WATER.....	24
Isayeva Narmin.....	25
EFFECTS OF HIGH-FREQUENCY RANGE OF ELECTROMAGNETIC RADIATION ON THE GROWTH PROPERTIES OF PATHOGENIC CORYNEBACTERIA.....	25
Joshna Thapa, Asma Anwardeen.....	25
CONGENITAL DISEASE OF HEART.....	25
Kolodeznaya T.Yu., Zupanets K.O., Ratushnaya K.L., Dobrova V.Ye.....	26
THE PROCEDURE OF SIGNING THE INFORMED CONSENT AS A KEY FACTOR OF BIOETHICAL NORMS GUARANTEE DURING CLINICAL TRIALS OF DRUGS.....	26
Kukushkina M.....	27
THE INFLUENCE OF DEXAMETHASONE PRENATAL INTRODUCTION ON CEREBRAL METABOLISM IN RATS - DESCENDANTS OF THE 1ST GENERATION.....	27
Kulakova K. A.....	28
ASSESSMENT OF EFFICIENCY AND SAFETY OF CONTRACEPTIVES MINI-PILL.....	28
Kumah Ruth Jadu.....	29
HOW THE BRAIN AND HEART INTERFACE WITH OUR EMOTIONS.....	29
Lomakina O., Oliynik A.....	30
IMETELSTAT - NEW THERAPEUTIC REMEDY FOR ADVANCED NON-SMALL-CELL LUNG CANCER.....	30
Mirza Himayatullah Baig, Bijay Chaudhary.....	31
SENSORY SYSTEM.....	31
Mohamad Sultan, Isaeva I.N, Karmazina I.S.....	32
RESEARCH OF AUTONOMIC SUPPLY OF INTELLECTUAL ACTIVITY IN YOUNG PEOPLE.....	32
Mosina N.....	33
AGE FEATURES AND BLOOD SUPPLY OF THE THYMUS.....	33
Mustafa M. Alhaad, Kudina O.V.....	34



vision in a region of the retina called the fovea. For this reason, dim objects in the darkness can be viewed better from peripheral vision than from direct focus. There are three kinds of cones in the vertebrate eye—one responsive to wavelengths of light corresponding to the colour blue, one responsive to red wavelengths, and one responsive to green wavelengths. These three colours form the entire range of colours that humans can perceive.

Hearing receptors, or hair cells, are mechanoreceptors located within a bony spiral structure called the cochlea. Sounds are interpreted by the brain from patterns of air pressure caused by the vibration of objects. Sounds can also travel through water or solid objects. In mammals, the pressure in the air is transformed into mechanical pressure by three ear bones called the malleus, incus, and stapes, located in the middle ear.

**Conclusion.** Balance Receptors. Vertebrate balance receptors are located in a specialized organ in the inner ear called the vestibular organ. This structure is located directly adjacent to the cochlea, and is composed of a triplet of semi-circular canals, each of which is oriented in a different plane—the X, Y, or Z axis. Movement of liquid in these tubes caused by rotation of the head or body are measured by vestibular hair cells. The stereo cilia of these cells are embedded in a gelatinous material called the otolith membrane. Gravity and body movements cause the otolith membrane to slide, which cause the stereo cilia to bend in a particular direction. This leads to electrochemical changes in the hair cell, causes an action potential in the associated nerve ending. Information from the vestibular system allows eye and head movements to fix on a particular target, and to stabilize a moving image. It also allows organisms to balance—for example, when a cat walks atop a fence.

**Mohamad Sultan, Isaeva I.N, Karmazina I.S.**

## **RESEARCH OF AUTONOMIC SUPPLY OF INTELLECTUAL ACTIVITY IN YOUNG PEOPLE**

**Kharkiv National Medical University, Kharkiv, Ukraine,**

**Scientific supervisor: Isaeva I.N.**

**Introduction.** According to neurophysiology, there is a difference in the levels of the activity of different parts of the cortex hemispheres between males and females, which is manifested by the difference of speed of decision making, and reactivity, accompanied by different levels of physiological changes of some vital signs, such as elevating the heart rate, and blood pressure, as it can be seen in the results of the stroop test.

**Aim.** To investigate the differences of autonomic supply in males and females, during the state of mental activity using Stroop test.

**Materials and methods.** The study included 20 young adults (19-24 years), among them 10 males and 10 females. Vegetative indicators were selected for studying such as: systolic (SAP) and diastolic (DAP) arterial blood pressure which were studied by Korotkov method (mmHg); heart rate (HR) (bpm) which was calculated on the radial artery pulse, and Dagnini-Aschner (oculocardiac) reflex which was used to test the differences of reactivity of the autonomic nervous system between both sexes, and stroop test as the state of mental activity.

**Results.** According to the results the mean HR increases in percentage (18.3%) compared to the mean value in males (10.3%) with difference between their values before and after the test, but the mean DAP in males (18.7%) is higher after the test than that in females (14.8%), but the difference between the mean SAP value in males (12%) and females (14.3) its higher in females, and the mistakes in females decisions is more than



twice that in males (112.5%), where the mistakes average in females is (1.7) and in males is (0.8), and that females act faster (average 25.7 sec) than males (27 sec in average- which is longer in 4.8%), In addition the results of oculo- cardiac reflex test show that the mean HR in males in rest state was 67.2 bpm and that of females was 70.8 bpm, taking into account the same duration of pressing on the eyeballs (5-7 sec), this value decreased in males to 61.2 bpm (reduced by 6 bpm- 8.9%), and that for females to 60 bpm (reduced by 10.8 bpm- 15.2%).

**Conclusions.** 1. Our study shows that in females compared to that in males, which can be seen in the mistakes average in females (1.7) and in males (0.8), probably because females tend to act faster (average 25.7 sec) than males (27 sec in average- which is longer in 4.8%), because the HR and BP rise more in females the activity of these cortices is higher and the error rate is higher. 2. The autonomic supply and reactivity of the autonomic nervous system is higher in females as it can be seen by more "effective" results in oculo-cardiac reflex test ,where the HR in females decreases 1.7 times more than males.

**Mosina N.**

### **AGE FEATURES AND BLOOD SUPPLY OF THE THYMUS**

**Kharkiv National Medical University, Kharkiv, Ukraine,**

**Department of human anatomy**

**Scientific adviser: as. Ghranyna E.**

**Introduction.** Thymus – thymus is the central organ of the immune system (lymph immunotsitopoez), located in the anterior upper mediastinum behind the breastbone, speaking on the jugular notch at the bottom reaches 3-4 ribs, occupying the top interpleural field. At the top of the thymus juts out into the neck where it can come into contact with the thyroid gland, and it reaches the bottom of the pericardium and covers it on a different length. Gland located behind the trachea and large blood vessels (brachiocephalic vein, superior vena Vienna, aortic arch and its branches). Most of its front and lateral surfaces covered with pleura.

Thymus gland has the following age-related features: formed before other organs of the immune system and the time of birth has a significant weight -in average 13.3 g (7.7 to 34.0 g). After the birth during the first 3 years of life thymus grows more intense. In the period from 3 to 20 years is quite stable thymus weight (average 25,7-29,4 g, according to VI Puzik). After 20 years of thymus weight gradually decreases due to age involution. Older people and old people, the weight of the thymus 13-15 with increasing age changes the microscopic structure of the thymus. The reseach revealed that after birth (about 10 years) cortex is prevails in the thymus. Parenchyma of thymus takes up 90% of the body. For 10 years the size of the cortex and medulla are approximately equal. In the future, the zone of the cortex becomes thinner, reduces the number of thymocytes. In the body grows fat tissue with connective tissue in people older than 50 years, it is up to 90 . Parenchyma of the thymus in the age involution does not disappear completely, and is stored in the form of islands surrounded by fatty tissue that lies behind the breastbone. Thymus is supplied with blood vessels such: -a.a. thymici from a.thoracica interna from a. subclavia; -r.r. thymic a.a. intercostales (posteriores), departing in their final part in the sternum – branches of pars thoracica aortae descendens; -a.a. thymici of truncus brachiocephalicus (often absent)

Blood flow occurs by name in the arteries veins v. thoracica interna et v. brachiocephalica.