

# ISIC-2022 International Scientific Interdisciplinary Conference









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variable evaluation of efficiency of decreasing their symptoms. For about 15.8% of respondents have tried to use day-time tranquilizers and 6.7% use them regularly. In spite of being not mentioned in the official instructions the forming of tolerance was very markable. The symptoms of depressing central nervous system were also present. So, mental disorders were proved to be one of the main health problems in society. Therapeutical strategy should be formed individually according to expressiveness of symptoms for each patient to minimize side effects.

Sukharieva Liliia, Markovska Olena

# MACROPHAGES AND THEIR PHENOTYPIC VARIABILITY IN THE SKIN WITH UNDERLYING SOFT TISSUES IN PATIENTS WITH MULTIPLE SCLEROSIS

Kharkiv National Medical University
Department of General and Clinical Pathological Physiology named after D.O. Alpern
Kharkiv, Ukraine
Scientific advisor: prof. Myroshnychenko Mykhailo

Background and objective. Multiple sclerosis (MS) is a neurodegenerative, demyelinating nervous system disease. Macrophages role in MS pathogenesis is not fully understood. The objective was to reveal the macrophages activity, their phenotypic variability in the skin in patients with different types of MS.

Methods. The material was the skin with underlying soft tissues from 16 patients with relapsing-remitting MS in exacerbation period (group (G) 1); 11 patients with secondary progressive MS (G 2); 8 patients with primary progressive MS (G 3); 10 autopsy cases without nervous system pathology (G 4). An immunohistochemical reaction with monoclonal antibodies to CD68, CD86, CD163 was used.

Results. In G 1-4, CD68+-cells (general macrophages population), CD86+-cells (M 1-macrophages), CD163+-cells (M 2-macrophages) were detected in epidermis; dermis, hypodermis between connective tissue fibers, perivascular, around nerve fibers. The absolute number of CD68+-cells was higher in G 1-3 (G 1 – 11.4 $\pm$ 0.38, G 2 – 15.6 $\pm$ 0.43, G 3 – 19.2 $\pm$ 0.53) compared to G 4 (3.6 $\pm$ 0.22), increased in direction from G 1 to G 3. In G 4, the relative number (RN) of CD86+-cells ((48.4 $\pm$ 1.72)%) and CD163+-cells ((51.6 $\pm$ 1.72)%) did not differ; in G 1, the RN of CD163+-cells ((69.4 $\pm$ 1.23)%) prevailed over CD86+-cells ((30.6 $\pm$ 1.23)%), in G 2-3, the RN of







CD86+-cells (G  $2 - (70.8\pm1.96)\%$ ; G  $3 - (87.1\pm1.74)\%$ ) prevailed over CD163+-cells ((G  $2 - (29.2\pm1.96)\%$ ; G  $3 - (12.9\pm1.74)\%$ ).

Conclusions. In patients with MS, macrophage system activation in the skin was noted, more pronounced in primary progressive type, moderately pronounced in secondary progressive type, less pronounced in relapsing-remitting type. The macrophages phenotypic variability was determined by the MS types (in relapsing-remitting type, the number of M 2-macrophages prevailed; in primary and secondary progressive type, the number of M 1-macrophages predominated). Macrophage system activation, imbalance between macrophages phenotypes may play one of the key roles in pathogenesis of MS various types.

### Tsymbal Maryna

# DIC SYNDROME AS ONE OF THE FACTORS IN THE DEVELOPMENT OF BLEEDING IN OBSTETRICS

Kharkiv National Medical University Department of Pathological Anatomy Kharkiv, Ukraine Scientific advisor: Horhol Nataliia

Hemostasis system disorders occupy one of the leading places in the development of obstetric pathology. This is due not only to medical aspects, but also to social ones, because the maternal mortality rate due to bleeding in Ukraine is 30%. According to the WHO, annually postpartum and early labor bleeding occurs in 14 million women, of whom 128 thousand die from this pathology in the first 4 hours. DIC syndrome (desiminated intravascular coagulation syndrome) is one of the factors that worsen the patient's condition to critical, so proper diagnosis and timely treatment can improve the course of labor in women suffering from this syndrome.

DIC syndrome is a nonspecific pathological process based on activation of vascular platelet and coagulation hemostasis.

The pathogenesis of DIC syndrome is based on the discoordination of the function of the coagulation and anti-coagulation systems of the blood responsible for hemostasis.



# Conference schedule and passwords for access to webinar rooms

# Zoom Cloud Meetings (registration in the app is required) Webinar room Meeting ID: 491 132 1524

Password: 123456

23rd November 2022	24th November 2022	
09.00-11.00 – Group A	09.00-11.00 – Group D	
11.00-13.00 – Group B	11.00-13.00 – Group E	
13.00-15.00 – Group C	13.00-15.00 – Group F	
10.00-23.00 – Poster section Voting for the best poster via the link: http://bit.do/ISIC2022-poster	16.00-17.00 – Closing Ceremony of the ISIC-2022	

### Group B

Chairman: Sushetska Daryna

1. VIOLATION OF PSYCHOEMOTIONAL STATUS IN PATIENTS WITH CHRONIC HEART FAILURE OF ISCHEMIC ORIGIN WITH CONCOMITANT METABOLIC PATHOLOGY

Bakir Mohd Basel, Borovyk Kateryna, Ryndina Nataliya (Department of Internal Medicine No.2, Clinical Immunology and Allergology named after academician L.T. Malaya, Kharkiv National Medical University)

2. IRISIN, AS A DIAGNOSTIC MARKER OF THE DEVELOPMENT AND COURSE OF ACUTE MYOCARDIAL INFARCTION IN PATIENTS WITH TYPE 2 DIABETES AND OBESITY

Habdrakhmanov Illia

(Department of Internal Medicine No.2, Clinical Immunology and Allergology named after academician L.T. Malaya, Kharkiv National Medical University)

3. GENDER DIFFERENCES IN LIPID PROFILE IN PATIENTS WITH DIABETES MELLITUS TYPE 2

Alvieva Susana

(Department of Internal Medicine No.3 and Endocrinology, Kharkiv National Medical University)

4. FEATURES OF THE FUNCTIONAL STATE OF THE CARDIOVASCULAR SYSTEM IN STUDENTS

Teslenko Anna

(Department of Pediatrics, V.N.Karazin Kharkiv National University)

5. THE INFLUENCE OF APPLYING STEM CELLS ON THE RNA CONTENT IN PROCESSES OF NEURONS OF CEREBRUM ON THE EXPERIMENTAL NITRITE MODEL OF ALZHEIMER'S DISEASE

Khaustova Marharyta, Lukyanova Yevgeniya

(Department of General and Clinical Pathological Physiology named after D.O. Alpern, Department of Pathological Anatomy, Kharkiv National Medical University)

6. MACROPHAGES AND THEIR PHENOTYPIC VARIABILITY IN THE SKIN WITH UNDERLYING SOFT TISSUES IN PATIENTS WITH MULTIPLE SCLEROSIS

Sukharieva Liliia, Markovska Olena

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7. FRACTAL ANALYSIS OF CEREBRAL HEMISPHERES: QUANTITATIVE ASSESSMENT OF BRAIN ATROPHIC CHANGES IN NORMAL AGING Maryenko Nataliia

(Department of Histology, Cytology and Embryology, Kharkiv National Medical University)

8. NEUROLOGICAL DISORDERS IN PATIENTS WITH CORONAVIRUS DISEASE (COVID-19)

Yurko Volodymyr, Shakirianova Daryna

(Department of Neurology, Kharkiv National Medical University)









