## **DEPUTY EDITOR-IN-CHIEF'S PREFACE TO ISSUE 2, 2024**

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Dr. Sc. (Med.), Professor, Corresponding Member of RAS Dear readers!

In the new issue of our journal, you will find articles on the latest advances in various areas of medicine.

I would like to draw your attention to a few leading articles. First of all, this is an up-to-date study by authors from Moscow (**Fisenko N.V. et al.**), which assesses the toxic effect of drugs lowering intraocular pressure on a primary culture of human corneal epithelium and A549 immortalized cell line. It has been noted that cytotoxic effect of antiglaucoma drugs is caused by the presence of benzalkonium chloride in their composition.

The second leading article is a review by a team of authors from Simferopol (**Beloglazov V.A. et al.**), which presents the available data on the state of low-grade systemic inflammation in patients who have suffered a new coronavirus infection.

A team of authors from Irkutsk (**Garashchenko N.E. et al.**) carried out another leading review article. It is of interest for both fundamental science and practical medicine and is devoted to the studying the relationship between melatonin and gut microbiome.

Currently, one of the most important and global problems is the health of children. This is the subject of a number of articles in current issue. The authors from Irkutsk (**Shugaeva S.N. et al.**) has shown in their article that a predictor of tuberculosis in children, regardless of their HIV status, is recurrent lower respiratory tract infections, registered during the year preceding tuberculosis. In addition, recurrent upper respiratory tract infections do not affect the development of tuberculosis as monoinfection and in coinfection with HIV.

There is an increasing need to develop an assessment of the quality of life of children with post-COVID syndrome. Authors from Donetsk (**Makhmutov R.F. et al.**) presented a clinical case on the assessment of the quality of life of a child with post-COVID syndrome using their own methodology.

The authors from Arkhangelsk (**Ukhanova A.V. et al.**) determined specific indicators of socio-economic well-being that are most closely related to both the tension of the mechanisms of cardiac activity and the decrease in vagal reserves of autonomic regulation in young men (16–18 years old), living in the Russian Arctic.

A series of articles addresses women's health issues. Authors from Irkutsk (**Semenova N.V. et al.**) assessed the general antioxidant and glutathione status, superoxide dismutase activity in menopausal women with moderate and asymptomatic COVID-19 and showed that their activity of the antioxidant defense system directly depends on the disease progression type.

A team of authors from Izhevsk (**Semenova M.V. et al.**) presented an interesting clinical case of pregnancy complicated by thrombotic thrombocytopenic purpura. Timely diagnosis of this pathology will significantly reduce the number of maternal and perinatal losses.

Researchers from Arkhangelsk (**Shchegoleva L.S. et al.**) assessed cellular immunity in women 20–40 years old living in different climatic and geographical regions. Features of the formation of adaptive immune reactions are determined by the different quantitative and qualitative composition of phenotypes of lymphocytes and cytokines. A reduction in the reserve capacity of immune homeostasis was detected 3 times more often in inhabitants of the Arctic region.

Ovarian cancer remains an urgent, complex and socially significant problem. Researchers from Irkutsk (**Radostev S.I. et al.**) applied and proved the significance of the HIPEC method in the treatment of patients with ovarian cancer with symptoms of peritoneal carcinomatosis.

The article on male reproductive health is also especially noteworthy. Authors from Novosibirsk (**Notov I.K. et al.**) studied the features of structural changes in the prostate during bipolar plasma and thulium fiber laser enucleation of benign prostatic hyperplasia and showed that the intraoperative effect of the thulium fiber laser is less traumatic for the cells and intercellular matrix of the surgical prostate capsule compared to the bipolar plasma exposure.

The issue also contains articles on experimental research. A team of authors from Nizhny Novgorod (**Malygina D.S. et al.**) studied the effect of 1,2,4-triox-olanes in a pharmaceutical composition with betulin, which exhibits woundhealing properties, on indicators of oxidative stress and energy metabolism in the treatment of burns in an experiment on rats.

Authors from Novosibirsk and Saint Petersburg (**Gulyaeva M.A. et al.**) studied the therapeutic effect of the drug Molixan in the treatment of coronavirus infection in model animals – Syrian hamsters.

In current issue, you will find other articles on other interesting topics that will help broaden the horizons of readers. Our magazine strives to constantly develop and keeping its content up-to-date in order to remain one of the leading titles in its field. We express our gratitude to the authors for their work and interest in our journal, as well as to the reviewers for conducting high-quality reviews in a short time.

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