

DEPUTY EDITOR-IN-CHIEF'S PREFACE TO ISSUE 6-1, 2021

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This issue of the Acta biomedica scientifica journal presents reviews and original researches on modern problems of ophthalmology, carried out by specialists from various clinics, institutes and branches of the S. Fyodorov Eye Microsurgery Federal State Institution from St. Petersburg to Vladivostok. The editorial board of the journal is confident that these materials will be of interest to a wide range of doctors of various specialties.

First of all, I would like to draw the reader's attention to the articles from the Irkutsk and Novosibirsk branches of the S. Fyodorov Eye Microsurgery Federal State Institution, devoted to eye damage in autoimmune polyendocrine syndrome and genetic determination in the development and progression of diabetic nonproliferative retinopathy. These studies are important for the prognosis, diagnosis and treatment of these diseases.

Of great interest is the work from the Khabarovsk Branch of the S. Fyodorov Eye Microsurgery Federal State Institution, which proved that a woman with complications of pregnancy may experience significant disorders of vascular-platelet and coagulation hemostasis, which is undoubtedly of great clinical importance. Correlating with this article are the results obtained by doctors from the Konovalov Ophthalmological Center, who identified a number of specific OCT signs in multiple sclerosis.

The work from Krasnoyarsk State Medical University substantiated a non-pharmacological method of controlling the progression of primary open-angle glaucoma by means of dosed physical activity.

An up-to-date publication from Krasnodar reports a case of occlusion of the central retinal artery against the background of pneumonia caused by coronavirus.

Scientists from Barnaul, Krasnoyarsk, Chelyabinsk, and Voronezh devoted their work to elucidating aspects of the development of neovascularization of eye structures, including under the influence of anti-angiogenic therapy. In this regard, the information from the Moscow Branch of the S. Fyodorov Eye Microsurgery Federal State Institution about the formation of choroidal cavities in pachychoroidal neovascularopathy is important.

A number of works are devoted to the use of one of the most modern research methods in the clinic of eye diseases – optical coherence tomography (OCT). This allowed the authors to obtain priority data on improving early diagnosis, predicting and assessing the effectiveness of treatment of diabetic retinopathy, macular ruptures, to identify the features of pathological changes in the retina and vitreoretinal interface in the macular zone in patients with diabetic macular edema, as well as to establish the mechanisms of postoperative healing after laser correction of myopia. using the FEMTO LASIK method.

The issues of improving the surgical treatment of eye diseases are still topical. This is the subject of the work of doctors from the Cheboksary Branch of the S. Fyodorov Eye Microsurgery Federal State Institution, who showed that the implantation of intrascleral corneal segments into a corneal graft using a femtosecond laser is an effective method for correcting postkeratoplastic astigmatism. The work from the Ufa Research Institute of Eye Diseases of the Academy of Sciences of the Republic of Bashkortostan presents the results of a successful two-stage surgical intervention in patients with keratoconus and cataracts. The analysis of the effectiveness of the use of various multifocal IOLs was carried out in the work from the Orenburg Branch of the S. Fyodorov Eye Microsurgery Federal State Institution.

Theoretically and clinically important is the work from the Russian Medical Academy of Continuing Professional Education, which shows that in choroidal melanoma, an increase in the expression of microRNA-223 is observed, indicating an increase in cell proliferation, as well as the activation of tumor angiogenesis, assessed by a high level of micro RNA-126.

An article from the Kaluga Branch of the S. Fyodorov Eye Microsurgery Federal State Institution is devoted to the question of the timing of vitreoretinal surgery in children with retinopathy of prematurity.

The undoubted advantage of the selection of articles for this issue is the presence of literary reviews covering the current state of a number of important aspects of ophthalmology. This includes a work devoted to the complications of brachytherapy in organ-preserving treatment of choroidal melanoma and the possibilities of predicting them by the authors from St. Petersburg, as well as a review on the use of ultraviolet corneal collagen crosslinking in patients with a thin cornea from the Kaluga Branch of the S. Fyodorov Eye Microsurgery Federal State Institution.

Reviews on the issues of angiogenesis inhibitor therapy and ensuring the efficacy and safety of peripheral blockades were received from Krasnoyarsk and Irkutsk.

In general, the presented articles undoubtedly have signs of originality, are relevant and reflect current trends in the development of scientific research in the field of eye diseases.

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