

CONTACT LENSES

Danilichev V. F., Sazhin T. G., Suvorov A. S.

Research of pharmacokinetics of a recombinant prourokinaza, using therapeutic soft contact lenses 2

Research purpose: to study dynamics of concentration of the recombinant prourokinaza (RP) – “Gemaza” in moisture of a forward chamber of an eye when using the medical soft contact lens (MSCL) saturated with her solution. On the basis of the received results it is possible to draw a conclusion that “Gemaz” gets into moisture of anterior chamber at application of MSCL saturated with her solution, the optimum time spent of the medical contact lens impregnated with “Gemaza” for the patient's eye – not less than 140 min and no more than 200 min.

Keywords: fibrinoid syndrome, Gemasa, prourokinase, soft contact lens

Novikov S. A., Grabovetskiy V. R., Danilov P. A., Fedotova K., Belousova E. V.

One-day contact lenses and discomfort. Are there ways to solve the problem? 9

This article presents the results of the study and comparison of subjective feelings and objective data of the tear film and tear of the meniscus before and after wearing the new water gradient one-day contact lenses. Study parameters of the tear film was carried out using a new non-invasive technique using optical coherence tomography. The analysis of the data showed an increase in the thickness and stability of the over lens tear film while wearing water gradient lenses, which was accompanied by a sense of comfort throughout the day.

Keywords: daily disposable lenses, discomfort, OCT-meniscometry, optical coherence tomography, tear film, tear meniscus, water gradient contact lenses

SPECTACLES AND OPHTHALMIC LENSES

How will evolve the ophthalmic lenses designs in future? 15

Every new year is a time to think about the future – how the technology and design of ophthalmic lenses will evolve. In the online version of the 20/20 magazine we found a large survey with answers from representatives of leading optical companies. We offer to your attention the answers for two most interesting questions from the optical companies employees which products are well-known in Russian optical market.

Keywords: lens design, progressive lenses, “smart” glasses, spectacle lenses

RESEARCH

Smirnova I. Yu., Prediger V. M., Potykova Yu. A.

Epidemiology of disorders of refraction, accommodation and convergence, at schoolchildren of Siberia 19

The article presents data on the prevalence and dynamics of refractive disorders of accommodation and convergence, at 17360 schoolchildren of Novosibirsk and Novosibirsk region for the period from 2009 to 2016 and compared with the results of research carried out almost half a century ago.

Keywords: ametropia, astigmatism, epidemiology, heterophoria, hyperopia, myopia, refractogenesis

Korotkikh S. A., Nikiforova A. A., Andreeva M. S.

Epidemiology and risk factors of computer vision syndrome 30

This article describes the data of epidemiological cross-sectional study of computer vision syndrome severity across regular users of personal computers. To it authors proposed a new questionnaire scale of 0 to 88. 535 people participated in a survey. The average severity the GLC was 22 points. After multivariate analysis duration of work with the computer, female gender, ametropia, the lack of sporting activity were identified as a risk factors of computer vision syndrome.

Keywords: computer vision syndrome, risk factors, asthenopia, ametropia, oftalmoergonomics

NEW O.D.

Hanratty M.

OCT in optometric practice 35

This article will explore the use of this technology in clinical practice with an introduction to interpretation of the scans.

Keywords: OCT, retina, tomography

POINT OF VIEW

Gifford P.

Current information and trends in myopia control 42

This article is a brief review of scientific papers on the subject of myopia control.

Keywords: contact lenses, myopia control, ortho-k, safety

EDUCATION

Batrakova V. B., Kriger G. S.

International scientific web conference for students “Contemporary education system: training of specialist in medical optics” 46

This our brief report from new web conference.