

CONTACT LENSES

*Dave T.***Understanding multifocals and getting them to work**

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In the first of a series of articles looking at advances in soft multifocal contact lenses, Dr. Trusit Dave examines the design principles and material considerations behind current designs and introduces a new daily disposable multifocal lens.

Keywords: center for distance, center for near, daily lenses, monovision, multifocal lenses, spherical aberration

*Subbaraman L.***In focus with current contact lens materials and designs**

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An overview of new contact lens technologies, with a focus on what lens characteristics impact wearing comfort.

Keywords: astigmatism, contact lenses, design, materials, orthokeratology, presbyopia

DIAGNOSTICS, TREATMENT, PHERMACOLOGY, PHARMAGY

*Beldovskaya N. Yu., Novikov S. A., Lyubavskaya V.***On the diagnosis of the syndrome of tear dysfunction in the clinical practice**

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In this review, the authors draw the reader's attention to the increasingly common pathology of the organ of vision - the syndrome of tear dysfunction. Complex diagnostics of both normal and pathologically altered lacrimal organs, using the arsenal of modern diagnostic techniques (traditional ophthalmologic tests, computed tomography and dacryoscintigraphy) is mandatory before choosing contact lenses or during the period of dynamic observation of patients using contact lenses, and also when they have complaints of discomfort, lacrimation or pathological discharge. A significant number of publications have been devoted to the syndrome of lacrimal dysfunction with a violation of the stability of the tear film, whereas not all specialists in the field of contact correction of vision know and use in practice the modern possibilities for diagnosing the pathology of the teardrop apparatus. Timely diagnosis of tear and tear disturbances, according to the authors, contributes to reducing the number of complications and improving the quality of life of patients.

Keywords: computed tomography of lacrimal passages, contact correction of vision, contact lenses, dacryocystitis, dacryoscintigraphy, dacryostenosis, diagnosis of tearful dysfunction syndrome, dry eye syndrome, epiphary, lacrimation

RESEARCH

*Kulikov A. N., Kokareva E. V., Dzilikhov A. A.***Effect of crystalline lens density values on axial length measurement with IOLMaster partial coherence interferometry**

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Variability of crystalline lens optical density can affect the average refractive index of the eye shifting optical biometry results in axial length measurement. There were significant differences in axial length estimated in phakic and pseudophakic eyes. The axial length gap was considerably higher in eyes with nuclear cataract than in eyes with cortical and posterior capsular opacifications. However, the values of lens optical density did not significantly affect the axial length measurement inaccuracy.

Keywords: axial length, optical lens density, partial coherence interferometry

EDUCATION

*Shcherbakova O. A.***MAFO-2017: “Blue light is all around”**

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MAFO conference for the 18th time organized by the publisher of MAFO – Ophthalmic Labs & Industry was held on February 24, 2017 the day before MIDO at NH Hotel Milano Fiera.

IN PRACTICE

*Drozдова M. Yu.***Several cases from the practice of an optometrist**

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The article quotes three different cases from the author's practice: spontaneous adaption to a complex design of spectacle lenses of a user with no experience of wearing spectacles; potential of the human brain to adapt to correction at a certain motivation; possibility of identifying an endocrine disorder by a visit to the optometrist.

Keywords: astigmatism, diabetes, Optition's, progressive lenses