TURKISH JOURNAL OF OPHTHALMOLOGY

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EDITORIAL

Esteemed colleagues,

In the second issue of 2020, the Turkish Journal of Ophthalmology features one perspective, six original studies, one review, and four case reports.

The perspective article, prepared by our editorial board, is a summary of information about the COVID-19 pandemic, which is the top global issue at present, that may help our colleagues protect themselves and their patients. As some of our colleagues are also practicing 'pandemic hospital medicine' as well as ophthalmology during this time, we think this article will be useful in many aspects.

In this issue, Malkondu et al. presents an interesting study of mutations associated with granular corneal dystrophy. Different mutations in the transforming growth factor beta-induced (*TGFBI*) gene, located in the 5q31 locus, lead to granular corneal dystrophy types 1 and 2 (GCD1 and 2), Reis-Bückler corneal dystrophy, lattice corneal dystrophy (LCD), and Thiel-Behnke corneal dystrophy. Because GCD2 was first described in people in the Avellino region of Italy, it is referred to in the literature as Avellino dystrophy. *TGFBI* has a key role in the genetic basis of GCD1, and *TGFBI*-related dystrophies can show clinical variability even among members of the same family. Therefore, this genetic study by Malkondu et al., conducted in a specific region of Turkey, may serve as a valuable reference both for its similar and novel aspects compared to the literature.

Joint hypermobility (JH) is simply an increase in joint range of motion, but the diagnosis of joint hypermobility syndrome (JHS) is based not only in the presence of joint and musculoskeletal system symptoms, but also systemic findings. JH is a prominent feature of hereditary connective tissue diseases associated with genetic alterations in collagen fibers, such as Marfan syndrome, hypermobile Ehlers-Danlos syndrome (EDS), previously known as EDS type 3, osteogenesis imperfecta, and JHS. As the cornea consists mostly of type I and Descemet's membrane of type IV collagen fibers, it is quite reasonable to suspect that people with JH may exhibit changes in corneal biomechanics. Considering that the prevalence of JH is reported as 5–30% in epidemiological studies, Bayramoğlu et al. must be congratulated for their prospective clinical study that dispels this well-founded suspicion.

The fact that topical medication causes ocular surface damage and/or discomfort in nearly half of all glaucoma patients is a global issue that has been demonstrated in large series. In comparisons of drops containing benzalkonium chloride (BAC) as a microbiological stabilizer and drops without this preservative, those containing BAC are always found to cause more discomfort. For these comparisons to be unbiased and straightforward, the BAC-containing and BAC-free drops must contain the same active substance. Although both BAC-containing and BAC-free preparations are used in Turkey, there is no pair with the same active ingredient. Therefore, our colleagues in Turkey who do not have access to BAC-preserved and BAC-free commercial forms of the same drug will be very interested in the study by Kumar et al. in which they determined that BAC-free travoprost drops provided better patient comfort according to the Ocular Surface Disease Index and the Glaucoma Quality of Life-15 questionnaires.

Inferior oblique muscle overaction (IOOA) is a common eye movement disorder involving excessive elevation of the adducted eye. The diplopia and upward deviation in IOOA are disturbing to the patient both functionally and cosmetically. Surgical treatment of IOOA is based on reducing muscle function. Z-myotomy, one of the surgical options in patients with IOOA, is a procedure in which the extraocular muscle is weakened by two incisions made in the extraocular muscle margins. Other surgical options include inferior oblique muscle recession, anteriorization, tenotomy, and myectomy. Kızıltoprak et al. demonstrate the effectiveness of Z-myotomy in patients with minimal IOOA, which may be encouraging and of practical interest for general ophthalmologists, whose career and professional practice are not focused on strabismus.

Retinopathy of prematurity (ROP) is a vexing condition for obstetricians, pediatricians, and ophthalmologists because examination is difficult and requires special experience in diagnosis and follow-up due to the unique circumstances of the patient group, and from the medicolegal side, has led to unprecedentedly high compensation in malpractice lawsuits in Turkey. A reliable parameter that enables early detection of ROP will offer a valuable opportunity to address these concerns. Akyüz-Ünsal et al. showed that a cut-off value of 34.43 pg for mean corpuscular hemoglobin (MCH), one of the complete blood count (CBC) parameters, was a statistically significant

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predictor of ROP. As this is a very inexpensive and accessible parameter, this finding must be taken into consideration for Social Insurance Institutions, physicians, and patients.

Different results have been reported regarding seasonal variations in the incidence of rhegmatogenous retinal detachments. Seasonal variations should be evaluated based on their position on the calendar together with the altitude and climate changes in the geographic region. Erdöl et al. screened an 8-year period of medical records from the East Black Sea Region of Turkey to analyze the annual distribution of rhegmatogenous retinal detachment in 281 eyes of 276 patients and showed that there was no significant seasonal variation. While adding this finding to the contradictory literature data on the seasonal occurrence of rhegmatogenous retinal detachment, it should be noted that the climate in this region is frequently rainy and relatively cool even in the summer and is at a fairly high altitude.

Optical coherence tomography (OCT) has proven itself to be an objective, reliable, and reproducible technology in the early diagnosis and follow-up in glaucoma as well as retinal diseases. Optical nerve head analysis and retinal nerve fiber layer thickness measurements can be obtained easily and noninvasively. However, errors, anatomical variations, and artifacts can occur during scanning in one-third of patients. As these anatomical variations and artifacts can lead to errors in diagnosis and treatment, the article from Bayer and Akman reviewing ways to prevent these problems is a reference source of information that every ophthalmologist should know.

The pine processionary caterpillar is an insect covered with tiny, fine hairs. These hairs can become airborne and land on the ocular surface, where eye rubbing causes them to become embedded in the tissue. When inflammation surrounding the hairs obscures them, it is difficult to determine the cause of the resulting clinical pictures. Diagnosis is based on a detailed history obtained in light of this knowledge and the detection of hairs in the ocular structures. Bayraktutar et al. aimed to raise our awareness of this entity with their report of a case of ophthalmia nodosa that was initially misdiagnosed as fungal keratitis and later definitively diagnosed with *in vivo* confocal microscopy.

Koçak-Altıntaş et al. share in this issue an unusual association of inverse retinitis pigmentosa and scleromalacia with neovascular glaucoma in a patient who was treated with a single anterior chamber bevacizumab injection, along with high-quality anterior and posterior segment images.

Kayıkçıoğlu et al. reported anterior chamber migration of Ozurdex (Allergan Inc. Irvine, CA, USA) dexamethasone implant in 6 eyes with history of complicated cataract surgery, 3 (50%) of which had permanent loss of corneal transparency and required corneal transplantation. With this 6-case series, the authors point out that in addition to indication for implantation, the presence of the lens capsule barrier is also important in the selection of the eyes to receive dexamethasone implants.

In this issue, Berrak Şekeryapan Gediz shares a case report documenting for the first time the coexistence of Purtscher retinopathy and acute macular neuroretinopathy in a patient with visual complaints after chest trauma. The study demonstrates that although this condition is difficult to diagnose clinically, characteristic findings on OCT and OCT-angiography facilitate the diagnosis, and the author emphasized that acute macular neuroretinopathy should be kept in mind when a patient presents with posttraumatic vision loss.

From the reliable evidence obtained through original research, to the awareness-raising presentations of rare or previously unreported, diagnostically challenging cases, to the review that should reduce the margin of error in OCT in the diagnosis and monitoring of glaucoma, we believe this issue will be of great benefit to our readers.

Respectfully on behalf of the Editorial Board,

Sait Eğrilmez, MD