TURKISH JOURNAL OF OPHTHALMOLOGY



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AT A GLANCE

Esteemed colleagues,

In the third issue of 2023, the Turkish Journal of Ophthalmology features six original studies, four case reports, and one review.

In their prospective study titled "Contact Lens Use Advice-Risks and Outcomes. Are Patients Drowning in Information but Starved for Knowledge?", Tsatsos et al. assessed the contact lens hygiene awareness levels of 50 consecutive patients presenting to an eye casualty department and investigated the relationship between the type of contact lens used and their contact lens hygiene approach. The study included a high proportion of women, and the most commonly used contact lens type was monthly, followed by daily, bi-weekly, and a small percentage of extended-wear contact lenses. Based on their contact lens hygiene practices, the patients were classified into low-, moderate-, and high-risk groups. Of 25 patients diagnosed with corneal ulcer, 23 were found to have poor contact lens hygiene and these patients had slower visual recovery. The authors concluded that the patients did not have adequate knowledge about contact lens hygiene and emphasized the need for continuing education on this topic.

In their prospective study titled "Comparison of Hybrid Contact Lenses and Rigid Gas-Permeable Contact Lenses in Moderate and Advanced Keratoconus", Yıldız et al. fitted a new-generation hybrid contact lens to 51 patients and a gas-permeable rigid contact lens to 40 patients with moderate and advanced keratoconus and compared their clinical and topographic characteristics. The two groups were similar in terms of age, gender, and keratoconus stage and exhibited no difference in logMAR visual gain. There was a greater increase in vision in patients with central cones with both lens types, and this increase was more pronounced in the group using rigid gas-permeable contact lenses. However, the researchers noted that larger numbers and longer follow-up of keratoconus patients are needed to see the long-term results of hybrid contact lenses.

A study titled "Long-Term Follow-up Results of Primary Canaliculitis Patients", Bayuk et al. retrospectively examined the demographic characteristics, clinical findings, microbiological profiles, and treatment results of 26 patients diagnosed with primary canaliculitis. The patients' most common clinical complaint was epiphora (46.1%), followed by purulent discharge and itching. Many of the patients had been treated for chronic conjunctivitis and the time to diagnosis ranged from 1 to 60 months. Obstruction occurred more frequently in the lower canaliculi and the leading microbial agent was Actinomyces. The authors reported that in patients with canaliculitis, the signs and symptoms improved within one month after canaliculotomy and curettage of the canalicular content, but treatment was delayed because of late diagnosis.

Gür Güngör et al. investigated the role of vascular damage in the pathogenesis of glaucoma in their clinical study titled "Macular and Peripapillary Vascular Densities in Non-Glaucomatous Eyes of Patients with Unilateral Glaucoma". They evaluated optic nerve, peripapillary, and macular vessel densities in both eyes of patients with unilateral glaucoma and controls using optical coherence tomography angiography. There were significant differences in rim area, cup volume, mean cup/disc ratio, and retinal nerve fiber layer thickness in eyes with glaucoma compared to fellow eyes without glaucoma and controls. However, in terms of vascular density, except for the intradisc region, all parameters in the peripapillary and macular regions were lower in glaucomatous eyes while there was no statistically significant difference between fellow eyes without glaucoma and the control group. The researchers stated that the lack of vascular changes in the fellow eyes of unilateral glaucoma patients compared to controls did not support their hypothesis that the vascular pathway may be responsible for the pathogenesis of glaucoma.

In their study titled "Clinical Relevance of Choroidal Thickness in Obese and Healthy Children: A Machine Learning Study", Bulut et al. examined macular and peripapillary choroidal thicknesses with optical coherence tomography in 59 obese and 35 healthy children and evaluated the effectiveness of these parameters in distinguishing obese children from healthy children using the random forest (RF), support vector machine (SVM), and multilayer perceptron algorithms. The study showed that obesity has an effect on choroidal thickness, and the authors reported that both the RF and SVM algorithms were effective and accurate in the classification of obese and healthy children.

Kayhan et al. retrospectively compared inner retinal changes in 74 patients with multiple sclerosis (MS) and 40 healthy individuals in their study titled "Regional Analysis of Inner Retinal Layer Changes in Multiple Sclerosis with and without Optic Neuritis". They found that peripapillary retinal nerve fiber layer (pRNFL), macular retinal nerve fiber layer (mRNFL), ganglion cell layer (GCL), inner plexiform layer (IPL), inner nuclear layer, and total macular thicknesses were significantly thinner in the MS group. Similarly, MS patients with optic neuritis had significantly thinner

TURKISH JOURNAL OF OPHTHALMOLOGY



AT A GLANCE

mean pRSLT, mRSLT, GCL, IPL, and total macular thicknesses than those without optic neuritis, and the GCL and IPL thinning was significantly greater in the inferior subfield. The authors reported that GCL and IPL were a robust and reliable biomarker for MS patients.

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The review titled "Applications of Mitomycin C in Cornea and External Disease" by Crespo et al. provides information about the use of MMC in external disease, such as in pterygium surgery, ocular surface neoplasia, and refractive surgery. In addition to its treatment effectiveness, it also draws attention to the potential complications of using MMC, such as endothelial cell loss, corneal perforation, scleral melting, secondary glaucoma, iritis, and endophthalmitis. The authors mention the lack of consensus on MMC treatment protocols for corneal and external disease and discuss applications related to the use of MMC in their review of the relevant literature on this topic.

The first case report of this issue, by Uçakhan Gündüz et al., concerns the surgical treatment of limbal dermoid, a congenital benign tumor, and presents a lamellar keratoplasty technique performed using microkeratome-assisted anterior lamellar graft.

Mentes et al. describe a 65-year-old woman with sudden and severe vision loss in the left eye after receiving the second dose of Pfizer-BioNTech COVID-19 vaccine. They showed by multimodal imaging that the patient developed diffuse paracentral acute middle maculopathy (PAAM) with concurrent acute macular neuroretinopathy.

In a case report by Sedlak et al. titled "Late-Onset Neuromyelitis Optica Spectrum Disorder Mimicking a Non-Arteritic Anterior Ischemic Optic Neuropathy-Case Report", a 60-year-old female patient presenting with painless vision loss and suspected of having ischemic anterior optic neuropathy was found to have aquaporin-4 immunoglobulin G antibody positivity and contrast-enhanced MRI findings of optic nerve and optic chiasm inflammation. As a result, the authors emphasized that the possibility of late-onset neuromyelitis optica spectrum disorder should be considered in the differential diagnosis of ischemic optic neuropathy in older patients.

In a case report by Top Karti et al., a 43-year-old woman presenting with headache, limited leftward gaze, and muscle weakness on the left side of her face was diagnosed as having eight syndrome secondary to syringomyelia associated with type I Chiari malformation. The authors emphasized that this was the first reported case in which syringomyelia involving the brain stem caused eight syndrome.

We hope that the articles selected for this issue will provide you interesting and enjoyable reading.

Respectfully on behalf of the Editorial Board,

Nilgün Yıldırım, MD