2022 Issue 3 at a Glance:

Esteemed colleagues,

In the third issue of 2022, the Turkish Journal of Ophthalmology presents 8 original studies, 3 case reports, and a letter to the editor with a reply from the authors.

A clinical study by Kıyat et al. titled “Dry Eye and Meibomian Gland Dysfunction in Patients with Neovascular Age-Related Macular Degeneration Receiving Intravitreal Injection Therapy” aimed to evaluate the meibomian glands and presence of dry eye in 60 eyes of 30 patients receiving intravitreal injection therapy for neovascular age-related macular degeneration. Each patient received intravitreal injection therapy in one eye (Group 1), while the fellow healthy eye received no treatment (Group 2). Mean Schirmer 1 and tear film break-up time were found to be lower in Group 1. Group 1 did not differ significantly from Group 2 in terms of mean Oxford score or upper eyelid meibography score, whereas their lower eyelid meibography score was significantly higher.

In their study titled “Palliative Efficacy of Intrastromal Amniotic Membrane Procedure in Symptomatic Bullous Keratopathy Patients,” Furundaoturan et al. evaluated the results of intrastromal human amniotic membrane implantation performed for palliation in patients with symptomatic bullous keratopathy and limited visual potential. They stated that this method may be an alternative approach to keratoplasty in patients with poor visual prognosis after corneal transplantation.

Another study by Furundaoturan et al. titled “Evaluation of Choroidal Vascular Index in Amblyopic Patients” aimed to compare subfoveal choroidal thickness (SFCT) and choroidal vascular index (CVI) between patients with hyperopic or strabismic amblyopia and healthy eyes. The study included 17 patients diagnosed with strabismic amblyopia (Group 1), 29 patients diagnosed with hyperopic amblyopia (Group 2), and 16 eyes of 16 healthy volunteers (Group 3). SFCT was significantly increased in the amblyopic eyes of Group 2 patients compared to Group 3, while CVI was significantly lower in the Group 2 amblyopic eyes compared to fellow eyes and Group 3.

In their study titled “Hedgehog Signal Defect Leading to Familial Exudative Vitreoretinopathy-Like Disease and Gastrointestinal Malformation,” Şahinoğlu Keşkek et al. described a new genetic link between familial exudative vitreoretinopathy-like disease and malformations of the gastrointestinal tract, and emphasized the importance of the hedgehog pathway in the development of the retinal vascular system and intestines.

In a study titled “Survey of Intravitreal Injection Preferences for the Treatment of Age-Related Macular Degeneration and Macular Edema Among Members of the Turkish Ophthalmological Association,” Karabaş et al. conducted an anonymous internet-based survey with members of the Turkish Ophthalmological Association to analyze ophthalmologists’ current preferences for the treatment of age-related macular degeneration and macular edema and evaluate the off-label use of bevacizumab in Turkey. They determined that ophthalmologists used bevacizumab as a first-line agent in patients with age-related macular degeneration, diabetic macular edema, and retinal vein occlusion when the current legal regulations were considered, but the participants’ preference for bevacizumab decreased when economic and legal restrictions were disregarded.

Altınbay et al. conducted a study titled “Comparison of Reading Test Parameters from the Print and Tablet Application Forms of the Minnesota Low Vision Reading Test” including a total of 116 individuals (92 with normal vision and 24 with low vision). They compared reading parameters measured using the printed card and tablet application forms of the Turkish version of the Minnesota Low Vision Reading Test (MNREAD-TR) in individuals with normal vision and low vision and found that both forms gave similar results for reading acuity and critical print size in individuals with normal vision and for reading acuity and reading accessibility index in individuals with low vision.

In their study titled “Investigation of the Role of Convolutional Neural Network Architectures in the Diagnosis of Glaucoma using Colored Fundus Photography,” Atalay et al. evaluated the performance of convolutional neural network (CNN) architectures in differentiating glaucomatous eyes from normal eyes and showed that appropriately designed and trained CNNs can distinguish glaucomatous fundus photographs from normal ones with high accuracy, even with a small number of fundus photographs.

In a study titled “Effectiveness, Sensitivity, and Specificity of Intraocular Lens Power Calculation Formulas for Short Eyes,” Stopyra compared intraocular lens power calculation formulas in terms of absolute error (AE) and receiver operating characteristic curves in eyes with an axial length shorter than 22.0 mm. The author reported that the Hoffer Q formula gave the lowest AE level and emphasized that this formula could be recommended for the calculation of IOL power in hyperopic eyes.
The first case in the case reports section of this issue is from Athanasiadis et al. and titled “Descemet Stripping Endothelial Keratoplasty in Congenital Aniridia: An Interesting and Challenging Story.” The authors reported the results of ultra-thin Descemet stripping endothelial keratoplasty performed in a 59-year-old patient with congenital aniridia who developed progressive endothelial dysfunction and aniridia-related keratopathy and was observed to have corneal decompensation after cataract surgery.

In their case report titled “Asymptomatic Unilateral Full-Thickness Macular Hole in a Patient with Bietti Crystalline Dystrophy During 13-Year Follow-up with Optical Coherence Tomography,” Saatci et al. reported the longitudinal follow-up results of a patient with Bietti crystalline dystrophy who developed a unilateral full-thickness macular hole 13 years after her first examination.

The final case report, presented by Şahin et al. and titled “Sheath-Preserving Complete Optic Nerve Avulsion Following Closed-Globe Injury: A Case Report,” describes a case of complete optic nerve avulsion with intact optic nerve sheath as a result of injury by a compressed air hose.

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

Respectfully on behalf of the Editorial Board,
Hakan Özdemir, MD