2023 Issue 5 at a Glance:

Esteemed colleagues,

In the fifth issue of 2023, the Turkish Journal of Ophthalmology features 6 original articles, 1 review, 2 case reports, and a letter to the editor.

An article by Dericioğlu et al. titled “Predictive Factors of Complications and Visual Outcomes after Pediatric Cataract Surgery” from Marmara University Hospital, a referral center in Türkiye, reports a study including 80 eyes of 50 patients treated for pediatric cataract between 2010 and 2020 with an average follow-up time of 60 months. In this detailed retrospective analysis, it was determined that total/mature cataract morphology and the presence of any complication negatively affected final visual acuity, and the presence of congenital cataract and intraoperative anterior hyaloid membrane rupture increased the risk of postoperative complications (See pages 267-274).

Çeper et al. conducted a study titled “Multimodal Imaging of Reticular Pseudodrusen in Turkish Patients” at Ege University Hospital and showed that the most sensitive imaging methods that can be used in the diagnosis of reticular pseudodrusen are infrared imaging, which had a 95% detection rate, followed by spectral domain optical coherence tomography (SD-OCT) with a rate of 91.6%. Despite their lower sensitivity rates, red-free photography, fundus autofluorescence, and blue reflectance imaging were recommended as auxiliary modalities due to their specificity rates of 100%, 100%, and 99.6%, respectively (See pages 275-280).

A pilot study by Kandarakis et al. titled “Combining Perfluorobutylpentane (F₄H₅) with Glaucoma Drainage Device Implantation for Silicone Oil-Induced Glaucoma” comes from our neighbor’s capital, Athens, Greece. The study included 8 patients who had pars plana vitrectomy surgery with silicone oil tamponade and later underwent F₄H₅ washout to remove residual silicone oil with concurrent glaucoma drainage device (GDD) implantation to treat refractory glaucoma. They achieved a 60.9% reduction in mean intraocular pressure within 12 months after surgery and a decrease in the need for glaucoma medication from 4 drugs preoperatively to 0.75±0.89 drugs postoperatively. Based on these findings, the authors concluded that F₄H₅ is an effective emulsifier for silicone oil removal and can be used safely in combination with GDD implantation to control intraocular pressure in eyes with silicone oil-induced glaucoma (See pages 281-288).

In their study titled “Evaluation of Agreement Between Sweep Visual Evoked Potential Testing and Subjective Visual Acuity” including 49 subjects, Polat et al. concluded that the results of sweep visual evoked potential measurements and subjective visual acuity measurements did not show statistical agreement and that it would not be correct to use them interchangeably (See pages 289-293).

A study by Kaplan et al. titled “Clinical Findings and Optical Coherence Tomography Measurements of Pediatric Patients with Papilledema and Pseudopapilledema” included 58 children with pseudopapilledema, 32 children with mild-to-moderate papilledema, and 40 healthy controls. The authors concluded that in the differential diagnosis of papilledema and pseudopapilledema, which differ greatly in terms of follow-up and prognosis, non-invasive methods such as newly developed OCT techniques can spare patients from the stress and financial burden of expensive, extensive, and invasive procedures (See pages 294-300).

In their study titled “Detection and Classification of Diabetic Macular Edema with a Desktop-Based Code-Free Machine Learning Tool,” Kırık et al. investigated the effectiveness of the Lobe program, a personal computer-based machine learning tool that requires no coding knowledge, in the recognition and classification of diabetic macular edema (DME) in SD-OCT images. The study included 695 cross-sectional images of 336 patients with DME and images from 200 healthy controls. The developed model was found to have 99.28% sensitivity and 100% specificity for DME detection independent of class. Sensitivity and specificity according to label were 87.80% and 98.57% for diffuse retinal edema, 96.43% and 99.29% for cystoid macular edema, and 95.71% and 95.41% for cystoid macular degeneration, respectively (See pages 301-306).

In this issue, Anderson and Akduman’s article titled “Management of Myopic Maculopathy: A Review” addresses the diagnosis, clinical features, and treatment of myopic maculopathy, emphasizing the latest advances in the surgical treatment of myopic traction maculopathy. The comprehensive article discusses the possible advantages of using macular buckling in myopic maculopathy as well as the commercially available macular buckling materials, and reviews the new myopic traction maculopathy staging system and its role in the surgical management of these complex cases (See pages 307-312).
In their case report titled “Epithelial Inoculation After Small-Incision Lenticule Extraction (SMILE): A Case Report,” Ahmet et al. reported that immediate irrigation of the interface seemed to be a safe and effective treatment when epithelial inoculation is observed early after SMILE surgery, which has been performed since 2008 (See pages 313-317).

In another case report titled “Tractional Retinal Detachment Related to Hemoglobin C Trait Retinopathy: A Case Report,” Garrell-Salat et al. describe a patient they treated with vitrectomy. They authors stated that because Hemoglobin C disease can threaten vision due to retinal proliferation, similar to sickle cell retinopathy, these patients should be followed up regularly and emphasized that ultra-wide angiography is a useful method to detect peripheral ischemia in the earlier stages (See pages 318-321).

In their letter to the editor, Ali et al. shared their experience in the Department of Ophthalmology of Te Whatu Ora, referring to the article titled “Bacillary Layer Detachment in Acute Vogt-Koyanagi-Harada Disease” by Ataş et al. They emphasized that their own observations support those of Ataş et al. in terms of obtaining good visual outcome despite the presence of bacillary layer detachment, and that further studies are needed to evaluate other OCT characteristics associated with poor prognosis, increased complications (such as choroidal neovascular membrane), or recurrence (See pages 322-323).

We believe that this issue, which blends together original research findings, striking case reports, and a review penned by authors who are also innovators in the field, will be of considerable interest to our colleagues.

Respectfully on behalf of the Editorial Board,
Sait Eğrilmez, MD