

## EDITORIAL

### 2021 Issue 3 at a Glance:

Dear colleagues,

This issue of our journal includes 6 original research articles, 1 review, and 5 case reports that we hope you will read with interest.

Hematopoietic stem cell transplantation (HSCT) is the main treatment for malignant and benign hematological diseases such as thalassemia major, aplastic anemia, leukemia, and metabolic diseases such as Hurler syndrome. Graft-versus-host disease (GVHD) is a clinical disease with multiple organ and system involvement that occurs due to donor-derived T-cells recognizing host antigens as foreign. Ocular involvement can occur as a clinical manifestation of GVHD and is known as ocular GVHD. Kızıltunç et al. retrospectively reviewed the medical records of 218 pediatric patients who underwent allogeneic HSCT and determined that 51 (23.4%) of these patients developed GVHD. Four of the patients died during follow-up. Of the 47 patients who continued follow-up, chronic ocular GVHD was detected in 63.8%, and 4 patients with a median follow-up of 12.1 months were treated with topical cyclosporine-A due to severe dry eye findings. Two patients showed significant improvement in severe dry eye findings, while treatment was discontinued in one patient due to drug side effects. The authors emphasized that chronic ocular GVHD is a common finding of post-HSCT GVHD in children; therefore, patients should be examined periodically for dry eye. (See pages 134-138)

Subaşı et al. conducted a study investigating the effects and safety of cataract surgery combined with ab interno gelatin microstent (XEN 45 Gel Stent; Aquesys Inc, Aliso Viejo, CA, USA) implantation to reduce intraocular pressure (IOP) in open-angle glaucoma (OAG). They retrospectively evaluated data pertaining to 30 eyes of 25 patients who underwent this procedure performed by the same surgeon. Preoperative IOP decreased from  $20.37 \pm 4.80$  mmHg using a mean of  $3.07 \pm 1.04$  drugs to  $14.83 \pm 1.91$  mmHg using a mean of  $0.94 \pm 1.11$  drugs at 24 months ( $p=0.001$  and  $p<0.001$ , respectively). At 24 months, 55.6% of the patients had IOP  $\leq 18$  mmHg without medication, 94.4% had IOP  $\leq 18$  mmHg with or without medication, and 61.1% had  $\geq 20\%$  IOP reduction from baseline. The authors concluded that XEN 45 implantation provided a significant reduction in IOP and drug use and improved visual acuity with high success and low complication rates during follow-up. (See pages 139-145)

In a study aiming to determine the causes of blindness among patients applying to the health board of a hospital serving the Southeastern

Anatolia region of Turkey, Karahan and Demirtaş retrospectively analyzed the records of 340 individuals with bilateral vision loss among 3,234 patients who applied to the health board. Among these patients, 166 (48.8%) were female, 174 (51.2%) were male, and the mean age was  $64.3 \pm 25.4$  years. The most common causes of vision loss were cataract in 158 patients (23.2%), corneal opacity in 114 patients (16.98%), retinal dystrophy in 92 patients (13.5%), optic atrophy in 73 patients (10.7%), glaucoma in 65 patients (9.6%), and phthisis bulbi in 59 patients (8.7%). When evaluated according to age group, the most common causes of blindness were retinal dystrophy in patients aged  $<15$  years ( $n=9$ , 4.5%) and 15-40 years ( $n=21$ , 40.4%), and cataract in those aged  $>40$  years ( $n=72$ , 27.1%). Cataract (27.1%) and corneal opacities (18.4%) were most common in the  $>40$  age group. (See pages 146-150)

Clinical assessment of fixation behavior can be used to predict visual performance in children. In preverbal children with strabismus, evaluation of binocular fixation pattern is a good option for determining fixation preference. Şekeroğlu et al. conducted a study investigating the relationship between fixation preference and macular function on pattern electroretinogram (pERG) in children with strabismus. The study included 11 children with strabismus who underwent ophthalmological examination including binocular fixation pattern test, best corrected visual acuity (BCVA), and pERG. Correlations were observed between BCVA and P50 and N95 amplitudes in the non-preferred eyes ( $p=0.023$  and  $p=0.014$ ) and between interocular differences in BCVA and P50 amplitude ( $r=0.688$ ,  $p=0.019$ ). This result highlights the need for further and larger studies to evaluate the relationship between fixation preference and the electrophysiological function of the macula. (See pages 151-155)

Bilgeç et al. analyzed the ophthalmological, neurootological, audiological, and vestibular data of 16 individuals with pseudoexfoliation syndrome (PES) (study group) and 17 healthy individuals (control group) and found that PES patients had elevated pure-tone thresholds and reduced superior and inferior vestibular nerve function. The authors concluded that among the systems involved in balance, both the visual and vestibular systems are affected in patients with PES. (See pages 156-160)

Kıyat et al. conducted a prospective cross-sectional study to determine the functional and anatomical results obtained with intravitreal aflibercept (IVA) therapy in eyes with newly diagnosed, untreated neovascular age-related macular degeneration (nvAMD) and to investigate the effect of initial lesion characteristics on treatment outcomes. Of the

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139 eyes of 133 patients included in the study, all 139 eyes received 3 doses of IVA (group 1) and 62 of the eyes received 6 doses of IVA (group 2). Both groups had a statistically significant increase in mean BCVA with treatment ( $p < 0.001$  for both) and the proportion of eyes that showed complete response to treatment was 54.6% in group 1 and 58.0% in group 2. In addition to the successful functional and anatomical responses with 3 and 6 doses of IVA treatment in eyes with newly diagnosed and untreated nvAMD, it was noted that the presence of PED and especially serous PED were initial lesion characteristics that negatively affected treatment success. (See pages 161-168)

Fundus autofluorescence (FAF) is a noninvasive imaging method based on the principle of stimulating fluorophores with specific wavelengths and measuring the light they emit through barrier filters, and it has been embraced as a useful imaging method for explaining the pathophysiological mechanisms of retinal diseases, evaluating the risk of progression, and monitoring treatment outcomes. In this issue's review, Keşkek and Şermet provide basic information about FAF imaging and convey to the readers the importance of its use in dry age-related macular degeneration (AMD) and in identifying eyes with a high risk of progression. (See pages 169-176)

Endogenous bacterial endophthalmitis (EBE) accounts for less than 10% of all cases of endophthalmitis. It occurs as a result of hematogenous microbial spread that infiltrates the eye by crossing the blood-ocular barrier. Corredores et al. describes the case of a young athlete with a history of recurrent skin and soft tissue infections (SSTI) who presented with secondary disseminated infection and bilateral methicillin-resistant *Staphylococcus aureus* (MRSA)-EE as a complication of a suture abscess in the pelvic region. The authors point out that rapid initiation of ophthalmological and systemic treatment provided early infection control and prevented irreversible consequences. (See pages 177-180)

Yazıcı et al. report a 75-year-old diabetic man who presented with a black wound on his left eyelids and severe periorbital pain after falling and hitting the left side of his face 4 days earlier. He had black, necrotic crust over the left upper and lower eyelids and partially

necrotic oval lesions in the temporal and malar areas surrounded by erythematous skin that was firm and tender to the touch. In addition, the patient had proptosis, diffuse ophthalmoplegia, and central retinal artery occlusion suggesting deep orbital involvement. Computed tomography showed soft tissue abnormalities in the anterior orbit. The patient was successfully treated with subcutaneous debridement, antibiotic therapy, and metabolic support. The authors emphasized that periorbital necrotizing fasciitis should be differentiated from true bacterial invasion of the posterior orbit, which may require more aggressive treatments such as exenteration. (See pages 181-183)

Macular hole is characterized by a full-thickness defect in the retinal layers at the foveal center, and is an important cause of central vision loss. Although most macular holes are idiopathic, it is also a common complication in eyes with high myopia. Myopic macular holes are more difficult to repair with vitreoretinal surgery than idiopathic forms. Spontaneous closure is less common. Yüksel et al. report spontaneous macular hole closure by bridge formation after 66 months in a 51-year-old woman with degenerative myopia who was diagnosed with macular hole but refused surgical intervention. (See pages 184-187)

Menteş and Barış detected bilateral asymptomatic and quiescent type 1 neovascularizations (NV) on optical coherence tomography angiography (OCTA) in a 38-year-old man who presented with low vision in both eyes and had been diagnosed with Best vitelliform macular dystrophy (BVMD) 10 years earlier. They emphasized that OCTA is a noninvasive, easy, rapid, and reliable imaging method and is superior to other imaging methods in detecting NV lesions that occur secondary to BVMD, even if quiescent and asymptomatic. (See pages 188-191)

We hope that the articles featured in the third issue of this year will be of interest to you and will guide your medical practice.

**Respectfully on behalf of the Editorial Board,  
Özlem Yıldırım, MD**