2019 Issue 6 at a Glance:

This issue of our journal includes six original articles, one review, and four case reports that we believe will interest you.

Amblyopia is characterized by decreased visual acuity resulting from interrupted conduction between the retina and visual cortex during development of the visual system, with no apparent organic pathology. Relative afferent pupil defect may be observed in unilateral amblyopia. It has been suggested that weak fixation and light stimuli hitting extrafoveal areas of the retina may lead to changes in pupillary reflexes. Bitirgen et al. evaluated pupillary light reflexes in 14 anisometropic patients and 37 strabismic patients using dynamic pupillometry (MonPack One, France) and showed that the pupils of amblyopic eyes contracted later in response to light, remained contracted for a shorter time, and dilated faster (See pages 310-314).

Diabetic macular edema (DME) is the most common cause of visual loss in diabetic retinopathy (DR), and the 25-year cumulative incidence of DME in type 1 DM is reported to be approximately 29%. Yalçın et al. defined cystoid macular degeneration (CMD) in DME as the presence of cysts larger than 450 μm in horizontal diameter and 300 μm in vertical diameter that are located within 1000 μm of the foveal center and accompanied by macular ischemia, outer retinal damage, loss of foveal contour, and diffuse or mixed edema (See pages 315-322).

A study by Özdemir et al. evaluating the effectiveness and long-term outcomes of intravitreal dexamethasone implants in the treatment of DME in vitreomized eyes demonstrated improved vision and a decrease in central retinal thickness. Although the benefits of treatment lasted for at least 6 months in most patients, maximum effect was observed in the first 3 months. Two of the 17 patients had intraocular pressure elevation over 25 mmHg and were treated with antiglaucomatous drugs (See pages 315-327).

Full-thickness macular hole (MH) is an anatomical defect involving the complete disruption of all neural retinal layers in the fovea, from the internal limiting membrane (ILM) to the retinal pigment epithelium, and has an annual incidence of 7.4 per 100,000. Karaçoğlu et al. compared the outcomes of idiopathic MH operations performed with 23-G pars plana vitrectomy (PPV) under air versus standard PPV and found that PPV under air was superior in terms of parameters such as vitreous visualization, effective vitrectomy time, and total operative time. In the PPV under air group, retinal touch and sudden hypotony both occurred in 10% of the eyes, while 1 of 2 pseudophakic eyes had air escape into the anterior chamber and 1 had fogging of the intraocular lens. Micropipometry examination showed no retinal or optic nerve damage (See pages 328-333).

Keilani et al. present the clinical outcomes of patients with complicated retinal detachment associated with proliferative vitreoretinopathy in the lower quadrant who underwent pars plana vitrectomy followed by silicone oil-RMN3 (Oxane® HD) or silicone oil-perfluorohexyloctane (Densiron® 68). They report that the Densiron 68 group had higher anatomic success rates, no recurrence, and better visual acuity. There were no differences between the two groups in terms of intraocular pressure, emulsification, or intraocular inflammation (See pages 329-341).

Koçak et al. evaluated the effectiveness and safety of demarcation laser photocoagulation to prevent progression of subclinical retinal detachment (SCRD) to clinical retinal detachment. Of the 21 eyes of 20 patients that underwent 360° laser photocoagulation and were followed for at least 6 months, progression to clinical retinal detachment occurred in only 4 eyes, all of which had refractive errors greater than -3.0 diopters and multiple retinal tears in the upper quadrant. The authors emphasized that in patients with SCRD, demarcation laser photocoagulation should be considered as a primary treatment option to avoid potential complications of intraocular surgery (See pages 342-346).

Primary congenital glaucoma (PCG) can be sporadic or have a familial inheritance pattern and its prevalence varies from 1:2500 to 1:1000. Given the long life expectancy of pediatric patients and the potential for PCG to be progressive and result in blindness, the diagnosis, follow-up, and treatment of this disease are crucial. In this issue, Mocan, Mehta, and Aref review current developments regarding the genetics and surgical management of PCG. Their review includes a detailed explanation of genetic loci (GLC3A, B, C, and D) associated with the disease and protein structures that are important in the development of the trabecular network and Schlemm’s canal,
as well as a discussion of traditional surgical treatments and recent advances (See pages 347-355).

In the first case report of this issue, Baş and Gündüz describe how they treated both eyes of a patient with pediatric acute toxic epidermal necrolysis at bedside by using symblepharon rings for sutureless fixation of large (4x4 cm) amniotic membrane grafts. Bilateral epithelialization was achieved in 8 weeks, with no symblepharon, scar formation, or limbal stem cell deficiency observed in long-term follow-up (See pages 356-360).

Ocular tuberculosis is a rare form of extrapulmonary tuberculosis, with a prevalence of 0.2–18% depending on geographic region. In the second case report, Yaghoubi et al. present an Iranian patient with endophthalmitis in one eye, retinal vasculitis in the other eye, and infective endocarditis detected in systemic examination. PCR analysis of vitreous and pericardial fluid revealed Mycobacterium tuberculosis, and treatment was initiated with isoniazid, ethambutol, pyrazinamide, and rifampin. However, treatment was discontinued when the patient developed hepatitis. The patient was eventually treated with a combination of isoniazid/ethambutol with short-term systemic corticosteroids and exhibited significant visual improvement and no recurrence during 3 years of follow-up (See pages 361-363).

Vasoproliferative retinal tumors (VPRTs) are rare, benign tumoral lesions of unclear pathogenesis that appear as a raised, yellowish-pink vascularized mass on the surface of the retina. They are frequently located in the pre-equatorial or equatorial region of the inferior retina, especially in the 5–7 o’clock segment. In the third case report of this issue, Özalp et al. present their management of uveitis and secondary glaucoma after cryotherapy in a patient with multiple sclerosis and VPRT (See pages 364-366).

Finally, Değirmenci et al. describe a 70-year-old woman who was using leflunomide and systemic corticosteroids for rheumatoid arthritis and had decreased vision in her right eye and bilateral macular edema and choroidal folds. Based on optical coherence tomography findings of intraretinal and subretinal fluid accumulation in the right eye and intraretinal fluid accumulation in the left eye, she was diagnosed as having central serous chorioretinopathy-like maculopathy and the corticosteroid therapy was discontinued. Her maculopathy was completely resolved after 8 months of follow-up (See pages 367-369).

We hope you read the articles featured in our final issue of the year with interest and pleasure.

Respectfully on behalf of the Editorial Board,
Banu Bozkurt, MD