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EDITORIAL

2022 Issue 5 at a Glance:

Esteemed colleagues,

This issue of our journal features seven original articles, one review, and four case reports that we hope will provide interesting and useful reading.

Although computers have revolutionized all aspects of our lives, their prolonged use leads to ocular and general health problems such as eye fatigue, dry eyes, irritation, redness, temporary blurred vision, headache, back pain, and fatigue. Computer-related ocular problems are collectively called computer vision syndrome (CVS). Shah and Saboor aimed to investigate the prevalence of CVS symptoms and identify associated risk factors in computer-using bank employees in Pakistan. A total of 127 participants were administered a self-report questionnaire and underwent a comprehensive eye examination. Ocular symptoms were detected in 79.5% of the participants, with the most common symptom being burning eyes (77.2%). It was shown that female participants had a significantly higher risk of CVS than male participants (p=0.01), and the occurrence of CVS was significantly associated with total daily duration of computer use and duration of continuous computer use (p=0.001 and p=0.008, respectively) (see pages 295-301).

In a cross-sectional survey study conducted jointly by the Turkish Ophthalmological Association Cornea and Ocular Surface Society and Glaucoma Society, Yıldırım et al. evaluated the prevalence and clinical manifestations of ocular surface disease (OSD) related to chronic glaucoma drug use, examination methods used, risk factors, drugs considered responsible, and OSD treatment approaches in glaucoma patients in Turkey. They found that 45% of ophthalmologists detected OSD in at least 25% of their glaucoma patients, the most common symptom was conjunctival hyperemia (75.6%), prostaglandin analogs and alpha-2 agonists were reported to be the drugs that most commonly caused OSD, and artificial eye tear preparations were most preferred for symptomatic treatment (84.6%). The participating physicians considered benzalkonium chloride (BAC), number of drugs used, and duration of use as risk factors for the development of OSD, and it was emphasized that detecting OSD in glaucoma patients and planning personalized treatment would increase patient comfort, drug adherence, and treatment effectiveness (see pages 302-310).

Microbial keratitis (MK) is one of the leading causes of unilateral blindness worldwide. While trauma is the most common cause of MK in developing countries, contact lens (CL) use is predominant in developed countries. In recent years, the incidence of CL-associated corneal infections has increased in all countries. Mistakes in lens use and care play a major role in CL-related MK. Harbiyeli et al. retrospectively analyzed the medical records of 22 patients followed for CL-related MK and determined that the majority of female patients (13/16) were under 35 years of age, 95.4% of patients had at least one risk factor related to incorrect CL use, and the most common risk factor was sleeping with CLs (n=15, 68.1%). The most frequently isolated microorganism was *Pseudomonas aeruginosa* (n=8), and the causative pathogens had sensitivity rates of 84.2% to combined vancomycin-amikacin, 95% to combined vancomycin-ceftazidime combination, and 94.7% to moxifloxacin. The authors concluded that informing CL users in detail about CL use and cleaning may reduce the frequency of mistakes in use and thus infections, and noted that the current antibiotic options that should be preferred in empirical treatment continue to be largely effective against likely pathogens (see pages 311-319).

In their study to evaluate the repeatability, reliability, and inter-device agreement of central corneal thickness measurements made with 5 different devices, Şimşek et al. performed measurements with autorefractometry (Topcon, Japan), ultrasound pachymetry (UP) (Ceniscan, USA), high-resolution Pentacam (Oculus, USA), anterior segment optical coherence tomography (AS-OCT) (Optovue, USA), and Spectralis AS-OCT (Heidelberg, Germany) in 308 eyes of 154 patients (76 females, 78 males) aged 18-30 years. They stated that although UP has disadvantages, the method can be used with confidence in current routine clinical practice because it provides fast and accurate measurement. They also reported that the autorefractor had the highest repeatability and is relatively faster than the other methods, while the Pentacam had the lowest repeatability and longest measurement time (see pages 320-325).

In a study aiming to compare retinal microvascular changes between healthy patients recovered from novel coronavirus disease 2019 (COVID-19) and healthy individuals with no history of COVID-19 infection, Yılmaz Çebi et al. examined the right eyes of 52 patients who had COVID-19 and 42 healthy controls using optical coherence tomography angiography (OCTA) and observed that parafoveal vessel density (VD) in the superficial capillary plexus and both parafoveal and perifoveal VD in the deep capillary plexus were lower in the patient group compared to the control group (p=0.003, p=0.004, and p=0.001, respectively), while there was no significant difference in

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foveal avascular zone area. The authors suggested that the detected changes may be related to the presence of pneumonia, the need for low-molecular-weight heparin prophylaxis, or higher C-reactive protein and ferritin values (see pages 326-332).

Temel et al. analyzed quantitative OCTA data from diabetic patients with and without retinopathy and a control group and found that the mean foveal avascular zone area was larger and the average inner retinal layer thickness was lower in all diabetic patients (with or without retinopathy) compared to controls. They noted that changes in the microvascular structures of the retina may contribute to the progression of retinal neurodegeneration (see pages 333-339).

Menteş and Barış conducted a prospective cross-sectional study aiming to determine the prevalence of polypoidal choroidal vasculopathy (PCV) in neovascular age-related macular degeneration (nvAMD) patients who did not respond to intravitreal anti-vascular endothelial growth factor (anti-VEGF) treatment. Of 97 eyes of 88 patients with ongoing activation findings despite at least 6 doses of treatment, 63.9% were found to have PCV on indocyanine green angiography (ICGA). The authors concluded that the presence of PCV in resistant eyes would be a guiding factor in terms of both understanding the causes of treatment failure and adding different treatment alternatives to the treatment protocol (see pages 340-343).

Bilateral acute depigmentation of the iris (BADI) and bilateral acute iris transillumination (BAIT) are relatively new clinical entities characterized by pigment dispersion from the iris stroma in the former and from the iris pigment epithelium in the latter. In this issue's review, Tuğal-Tutkun and Altan present to our readership all current information about the clinical features, differential diagnosis, and etiopathogenesis of these two clinical entities (see pages 344-349).

In their case report, Baykara et al. describe a modified continuous suturing technique for firm fixation of human amniotic membrane (AM) graft in a 14-year-old patient with persistent epithelial defect after chemical eye injury. They point out that firm and long-term fixation of AM to the corneal surface may facilitate and accelerate epithelial regeneration (see pages 350-353).

Erişti Bölük and Aktaş report a patient with bilateral pseudoexfoliative glaucoma who underwent trabeculectomy with mitomycin C twice 10 years earlier, presented with intermittent bleb leakage and increased intraocular pressure (IOP) during recovery periods, and underwent gonioscopy-assisted transluminal trabeculectomy (GATT) combined with bleb excision. This method enabled IOP to be controlled without treatment while correcting the bleb leakage, and the authors concluded that GATT surgery may be an option in the revision surgery of glaucoma patients with intermittent bleb leakage after failed trabeculectomy (see page 354-357).

Solitary fibrous tumors (SFT) in the orbit are relatively rare and are often hypervascular. Large, hypervascular SFTs extending into the orbital apex present a serious surgical challenge. Due to the difficulty in accessing the apical-posterior part of the tumor, intraoperative bleeding may be difficult to control, resulting in only partial tumor removal and serious postoperative morbidities. Yazıcı et al. describe a patient who presented with a one-year history of increasing proptosis, pain, and blurred vision in the right eye, a hard, immobile palpable mass displacing the globe inferoposteriorly, restricted eye movements in all directions, afferent pupillary defect, exposure keratopathy, diffuse optic disc edema, and choroidal folds. Magnetic resonance imaging revealed a tumor 65x35x35 mm in diameter in the upper orbit that extended to the apex and showed intense contrast enhancement. The patient was diagnosed with SFT by incisional biopsy and underwent preoperative embolization with 500-700 μm tris-acryl gelatin microspheres. The tumor could be completely removed with minimal bleeding 2 days later. The authors emphasized that the use of this material may be appropriate for endovascular embolization of orbital SFTs (see pages 358-361).

Güven et al. used retinal autograft with silicone oil (SO) tamponade to treat macular hole in a patient who previously underwent multiple vitreoretinal surgeries due to retinal detachment in the right eye and developed recurrent retinal detachment and macular hole after SO removal. The SO was removed at postoperative 7 months, and closure of the macular hole and integration of the retinal autograft into the host tissue was observed on structural OCT and OCTA during the 18-month follow-up period. The study demonstrated the surgical applicability of autologous retinal grafts and the feasibility of using OCTA as a unique method for monitoring the healing process (see pages 362-367).

We hope the articles featured in our fifth issue of this year will engage your interest and guide your medical practice.

Respectfully on behalf of the Editorial Board,

Özlem Yıldırım, MD