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AT A GLANCE

2025 Issue 1 at a Glance:

Esteemed colleagues,

This issue of our journal features five original research articles, two reviews, and three case reports that we hope you will read with interest and benefit from.

Myopia is a common refractive error worldwide, and the increase in its incidence is regarded as a global epidemic. In addition to the direct economic and social burden of myopia, ocular complications associated with myopia can lead to severe vision loss. In a retrospective study aiming to investigate whether combination therapy with 0.05% atropine and Myopi-X® peripheral progressive addition lenses (PAL; Novax®) provided an additional effect compared to Myopi-X PAL or 0.05% atropine monotherapy, Akagün and Altıparmak compared a total of 51 patients who received Myopi-X PAL (n=27), 0.05% atropine (n=13), or combination 0.05% atropine and Myopi-X PAL (n=11) in terms of baseline characteristics such as age, cycloplegic spherical equivalent (SE), and axial length (AL), as well as SE and AL at 12 months after the start of treatment. They determined that the combination of 0.05% atropine and Myopi-X PAL did not show any additional benefit over the treatments alone (See pages 1-5).

Refractive accommodative esotropia (RAET) is a clinical entity characterized by convergent strabismus due to hypermetropic accommodative convergence. The mainstay of treatment in patients with RAET is full correction of hyperopia with glasses. In their retrospective study, Pelit and Sefi Yurdakul investigated the clinical features and risk factors of children diagnosed with RAET who developed spontaneous consecutive exotropia. They compared the medical records of 19 patients who spontaneously transitioned from RAET to exotropia (XT) and a control group 31 age-matched patients with RAET and spectacle correction of optical alignment for both near and distance. They found that patients with high hyperopia refraction values and those with concomitant inferior oblique overaction were at higher risk of developing XT, and emphasized that patients with these characteristics should remain under long-term follow-up (See pages 6-10).

Abnormal head position (AHP) is an adaptation mechanism in which the head is turned or tilted and the chin may be up or down in order to increase visual acuity, prevent diplopia, or provide comfortable binocular vision. AHP is not a diagnosis but a symptom of an underlying disease, although it may have no apparent cause in some cases. The most common causes of AHP are excessive contraction in the sternocleidomastoid muscle due to congenital muscular torticollis, ocular diseases, and central nervous system anomalies. The main ocular causes are fourth cranial nerve palsy, Duane retraction syndrome, sixth cranial nerve palsy, Brown syndrome, and nystagmus blockage syndrome. In their retrospective study examining the clinical features of patients with ocular AHP and investigating the effect of treatment on the change in AHP in a total of 172 patients (50% females, 50% males) with a mean age of 14.1±13.9 years, Erduran and Niyaz Şahin reported fourth cranial nerve palsy (50%), Duane retraction syndrome (16.9%), and A-V pattern strabismus (15.1%). They pointed out that ophthalmological and orthoptic examinations should be performed in patients with AHP, and strabismus surgery or botulinum toxin administration in eligible patients may reduce or completely correct AHP (See pages 11-15).

Candan et al. conducted a hospital-based epidemiological study aiming to determine the prevalence of the most common retinal vascular diseases and their most common complications in a tertiary hospital for the first time in Türkiye, and thus contribute to the protection of public health and the correct planning of health services and resources. The authors determined the prevalence of retinal vascular diseases as 1.4% in the general population, while the prevalences of diabetic retinopathy, retinal vein occlusion, and retinal artery occlusion, which are the most common retinal vascular diseases, were 1.12%, 0.27%, and 0.01%, respectively (See pages 16-23).

Genç Bozhöyük et al. examined the records of a total of 77 pediatric patients, 58 (75.3%) operated for congenital cataract and 19 (24.7%) for acquired cataract, with at least 1 year of follow-up. They evaluated preoperative strabismus types, changes in strabismus after surgery, and the characteristics of postoperative new-onset strabismus. The authors emphasized that strabismus is common in pediatric cataract, and despite successful surgical treatment, the prevalence of postoperative strabismus onset is high, especially in unilateral cases operated at 1 year of age or younger, which increases the risk of strabismus-related suppression and amblyopia, as well as cataract-related deprivation amblyopia (See pages 24-28).

Climate change is considered one of the biggest threats to global health in the 21st century, and the health sector is known to contribute significantly to the production of greenhouse gases. Ophthalmology, which has the highest number of surgeries in the health system and differs from other branches with its rapid patient circulation, may be responsible for a significant part of this carbon emission burden. In the first review in this issue, Kıyat and Palamar aimed to provide an overview of surgical strategies that can be applied in keratoplasty surgeries to maximize benefit and increase sustainability through efficient resource usage. In corneal transplantation surgeries, the authors state that reducing operating room time, appropriately training ophthalmologists and surgery team, reusing instruments such as trephines and punches, striving to ensure the economic use of surgical materials, and choosing the

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appropriate surgical technique are possible ways to improve sustainability and reduce costs during surgery. However, they point out that while taking measures to reduce costs, the utmost care must be taken to maintain safety and effectiveness in order to achieve a balance between sustainability and patient safety (See pages 29-35).

Pachychoroid diseases are a group of diseases characterized by increased choroidal thickness that share common underlying pathological mechanisms. Eyes presenting with pachychoroidal changes often show dilation in the large choroidal vessels, which causes compression of the overlying choriocapillaris and Sattler's layer. Pathological findings such as pigment epitheliopathy, choroidal neovascularization, submacular serous detachment, significant choroidal and scleral changes can be seen in pachychoroid spectrum diseases. In their review, Demirel et al. provide readers with up-to-date information on imaging methods used in diseases in the pachychoroid spectrum (See pages 36-48).

Korkmaz et al. present a patient with bilateral keratoconus who had a history of intrastromal corneal ring segment placement in the right eye and penetrating keratoplasty (PK) in the left eye and was using hybrid contact lenses. When his bilateral *Acanthamoeba* keratitis could not be diagnosed by microbiological examinations and *in vivo* confocal microscopy (IVCM), he developed corneal perforation on the right and simultaneous wound dehiscence on the left despite medical treatment. Due to the patient's renal failure, he was treated with simultaneous bilateral tectonic therapeutic PK to minimize the risks arising from general anesthesia. The authors pointed out that auxiliary diagnostic tools such as IVCM may be misleading in eyes where the normal anatomy has been altered by surgery, and inconsistency between the results of the diagnostic methods and the patient's clinical picture may delay the diagnosis and necessitate PK (See pages 49-52).

Jeune syndrome (JS), first described as asphyxiating thoracic dystrophy, is an autosomal recessive osteochondrodysplasia with characteristic skeletal abnormalities and variable renal, hepatic, pancreatic, and ocular complications. JS is classified among the hereditary syndromic retinopathies. The main cause of ocular pathologies in JS is genetic mutations in ciliary proteins that prevent normal functioning of the retinal photoreceptor cells. Aksoy and Tigrel describe a case of JS presenting with complaints of poor night vision despite 20/20 visual acuity, pointing out that hereditary retinal dystrophies should be considered in patients with syndromic comorbidities accompanying nyctalopia, even if visual acuity is perfect, and that structural and functional multimodal retinal imaging techniques should be used for diagnosis and genetic counseling should be provided (See pages 53-56).

Knobloch syndrome is a rare genetic disease caused by mutations in the *COL18A1* gene and characterized by extreme myopia, vitreoretinal degeneration, retinal detachment (RD), and occipital encephalocele. Abdullah et al. described a surgical technique using a double layer of human amniotic membrane used in a child with Knobloch syndrome presenting with chronic RD associated with high myopic macular hole and share the advantages and disadvantages of this technique (See pages 57-60).

We hope that the articles in our first issue of this year will make for interesting reading and provide guidance in your professional practice.

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