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What's new in the world of corneal treatment

It is very exciting that the current issue of the *Taiwan Journal of Ophthalmology* (TJO) of the Taiwan Ophthalmological Society selected several interesting and informative articles for the readers. Although most articles focus on the new development and knowledge of the cornea, this issue also includes some articles in other ophthalmic fields, including general ophthalmology, retina, and uveitis. We know that during the recent few years, TJO did a great job in promoting the most updated ophthalmological knowledge. We are confident that this issue will fit the need of the readers as usual.

This special issue contains three important review articles, five cutting-edge original articles regarding corneal biomechanical properties, demodex blepharitis, tear film markers, and dry eye diseases. It also includes severe unique case reports that presented unusual manifestations of common disorders, such as bilateral corneal edema in alcoholic males, toxic keratopathy related to antiseptics in nonocular surgery, to some less frequently encountered diseases, such as tuberous sclerosis and type 3 Usher syndrome. In addition, this issue also included three articles of letter to editor.

The three review articles present the informative knowledge in ocular surface, refractive surgery, and regenerative medicine. Matthias Fuest and Jodhbir S. Mehta wrote a comprehensive review article, which introduced refractive corneal lenticule extraction (RCLE), a relatively new technique mostly

dependent on a femtosecond (FS) laser.^[1-3] This technique has the potential benefits over the most popular laser-assisted *in situ* keratomileusis due to the quicker recovery of dry eye disease, a larger functional optical zone, and no flap-related complications. This review article introduced (1) SMILE, available with the VisuMax FS (Carl Zeiss Meditec AG, Jena, Germany), (2) SmartSight (SCHWIND eye-tech-solutions GmbH, Kleinostheim, Germany), and (3) CLEAR (Ziemer Ophthalmic Systems AG, Port, Switzerland). The latter two new techniques just received Conformité Européenne approval in 2020. This article reviewed the refractive and visual outcomes, advantages, and disadvantages of RCLE and also reported on the latest advances in RCLE systems.

Lingyi Liang wrote an article regarding the updated knowledge about the application of amniotic membrane (AM) in immune-related ocular surface diseases. This review summarizes the current literature regarding the clinical application of sutured and self-retained cryopreserved AM in treating Stevens–Johnson syndrome/toxic epidermal necrolysis, ocular graft-versus-host disease, Sjögren's syndrome, Mooren's ulcer, and peripheral ulcerative keratitis.^[4,5] Current evidence supports the safety and effectiveness of AM, especially self-retained cryopreserved AM (e.g. Prokera), in decreasing ocular surface inflammation, promoting corneal epithelial and stromal healing, improving visual acuity, and preventing sight-threatening complications.

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Robert Pineda reviewed the regenerative medicine in Fuchs' endothelial dystrophy. The treatment of choice for Fuchs' endothelial dystrophy currently is descemet membrane endothelial keratoplasty (DMEK), or descemet stripping automated endothelial keratoplasty (DSAEK). However, regenerative medicine has its unique benefits which cannot be replaced by penetrating of lamellar keratoplasty. This review is thus valuable.

We wish to thank all our authors for their wonderful work. Finally, we hope all readers could learn a lot from this issue.

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