

## Editorial

# Advances and Clinical Applications of Anterior Segment Imaging Techniques 2020

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Received 19 July 2021; Accepted 19 July 2021; Published 26 August 2021

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The rapid advancement of anterior segment imaging technologies in recent years has allowed for precise visualization and accurate assessment of the anterior segment structures. Therefore, these devices have become necessary for better diagnosis and treatment of anterior segment disorders, i.e., corneal diseases, cataract, glaucoma, and disorders of the eyelid and lacrimal system.

As we have mentioned in the call for papers, the published manuscripts cover the topics of anterior segment imaging techniques including corneal topography, confocal microscopy, anterior segment optical coherence tomography (OCT), specular microscopy, and ultrasound biomicroscopy (UBM). In addition to the application of these anterior segment imaging devices in research as well as in the diagnosis and monitoring of anterior segment disorders, particular interest was also placed on novel technologies of anterior segment imaging and applications of artificial intelligence in anterior segment imaging. In this Special Issue, the authors contributed 14 original research papers and 3 review articles regarding newly developed technologies of anterior segment imaging and clinical application of novel imaging devices.

The authors have contributed their original research papers on various topics on anterior segment imaging, as follows: (1) Changes in Corneal Volume at Different Areas

and Its Correlation with Corneal Biomechanics after SMILE and FS-LASIK Surgery; (2) Endothelial Plaques as Sign of Hyphae Infiltration of Descemet's Membrane in Fungal Keratitis; (3) The Effectiveness of Ultrasound Biomicroscopic and Anterior Segment Optical Coherence Tomography in the Assessment of Anterior Segment Tumors: Long-Term Follow-Up; (4) Observation of Gonio Structures during Microhook Ab Interno Trabeculotomy Using a Novel Digital Microscope with Integrated Intraoperative Optical Coherence Tomography; (5) Comparison of Different Types of Corneal Foreign Bodies Using Anterior Segment Optical Coherence Tomography: A Prospective Observational Study; (6) Function and Morphology of the Meibomian Glands Using a LipiView Interferometer in Rotating Shift Medical Staff; (7) Intraoperative Optical Coherence Tomography Analysis of Clear Corneal Incision: Effect of the Lateral Stromal Hydration; (8) Assessment of Scleral and Conjunctival Thickness of the Eye after Ultrasound Ciliary Plasty; (9) Bleb Morphology Using Anterior-Segment Optical Coherence Tomography after Ahmed Glaucoma Valve Surgery with Tenon Capsule Resection; (10) Keratoconus Diagnosis: Validation of a Novel Parameter Set Derived from IOP-Matched Scenario; (11) Eyes of Aniso-Axial Length Individuals Share Generally Similar Corneal Biometrics with Normal Eyes in Cataract Population; (12)

Comparison of the Stability of Two Intraocular Lenses in Primary Angle-Closure Glaucoma after Phacoemulsification; (13) Tear Lipid Layer Thickness in Children after Short-Term Overnight Orthokeratology Contact Lens Wear; (14) Effect of Topical Brimonidine 0.15% on Conjunctival Injection after Strabismus Surgery in Children.

This Special Issue also includes review articles on the following topics: (1) Objective Imaging Diagnostics for Dry Eye Disease; (2) Intraoperative Optical Coherence Tomography Imaging in Corneal Surgery: A Literature Review and Proposal of Novel Applications; (3) Advances in Imaging Technology of the Anterior Segment of the Eye.

We hope these papers will provide readers with valuable clinical information on anterior segment imaging and new ideas for research on associated topics.

### **Conflicts of Interest**

The Guest Editors declare that there are no conflicts of interest.

### **Acknowledgments**

This work was supported by Bumsuk Academic Research Fund in 2020.

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