## **Exploring a New Era in Uveitis**

"If your actions inspire others to dream more, learn more, do more, and become more, you are a leader."

- John Quincy Adams

Indian Journal of Ophthalmology (IJO) is enormously proud to feature Prof. Narsing A. Rao as part of its series "Living Legends in Ophthalmology." Prof. Rao is a world leader in uveitis, ocular immunology and pathology, and has inspired, empowered, and mentored generations of ophthalmologists to pursue this unique specialty with keen passion. Following his medical education at the Osmania Medical College, Hyderabad, India, Prof. Rao moved to the United States, trained in pathology and ophthalmology, focused on uveitis, ocular immunology, and inflammation, and deftly climbed the academic ladder to currently chair the Department of Ophthalmology at the University of Southern California, Los Angeles, CA, USA. For his outstanding contributions to ophthalmology, Prof. Rao has been awarded the Lorenz E. Zimmerman medal by the American Academy of Ophthalmology, the Ramon L. Font medal by the Pan American Society of Ophthalmology, and the prestigious Bietti Medal by the International Council of Ophthalmology. Prof. Rao is an astute clinician, keen researcher, passionate teacher, indulgent mentor, and an authority in his areas of focus—a true Living Legend in Ophthalmology. The story of his life and times is immensely inspiring and exemplifies what an ignited mind of a young ophthalmologist can help achieve. [1,2] Almost the entire lineage of uveitis specialists in India owes its origin to Prof. Rao.<sup>[3]</sup> This special issue of IJO also pays due tribute to Prof. Amod Gupta, who has spearheaded the clinical practice, training, and research of uveitis in India.[4]

In this special issue of the IJO, we concentrate on uveitis and ocular immunology. The articles in this issue have been carefully curated by the Guest Editors from the Uveitis Society of India (USI), and the IJO editorial board is extremely thankful to USI for doing a commendable job in putting this voluminous issue together.

General ophthalmologists often attribute uveitis to nonspecific immune mechanisms and use steroids in different forms to treat it. However, the subspecialty of uveitis has progressed in leaps and bounds over the past decades. It currently involves the use of sophisticated immunological biomarkers, [5] molecular diagnostics, advanced imaging techniques, and manipulation of interleukins and cytokines using biological agents to get the best results for our patients.<sup>[6]</sup> Of special note are the recent advances in imaging every layer of the uveal tract including enhanced depth imaging using optical coherence tomography (EDI-OCT), swept-source OCT technology to image deeper into the choroid, fundus autofluorescence, indocyanine green angiography with confocal scanning laser imaging to get sharper images, and wide-field and ultra-wide-field imaging techniques.[7] OCT angiography (OCTA) provides retinal and choroidal vascularity indices and has the potential to revolutionize uveitis practice patterns. It is giving us more insight into many enigmatic disease processes such as the white dot syndromes and

Harada's disease. [8] Studies based on these technologies have led to the discovery of many clinical and imaging-based biomarkers for every part of the disease process, i.e., diagnosis, monitoring treatment, and predicting outcomes. The articles in this issue touch on all these aspects in a relatively simple language and are written by the global experts themselves, who have laid the foundation for this new knowledge. The issue begins with a beautiful account of the history and evolution of the USI, pays tribute to the pioneers of uveitis practice in India, and then moves on to many different forms of uveitis and scleritis. [3-20]

Since the eye is an immune-privileged site and the cause of uveitis is often multifactorial, it becomes difficult to identify the underlying etiology. In these circumstances, a careful workup, based on history, clinical findings, and your own acumen and experiences, is the best way to establish the cause. Several review articles featured this month help broadly classify uveitis into infectious, noninfectious, and masquerading entities and understand the logical sequence and interpretation of investigations. However, pursuit of the underlying etiology is the biggest virtue, a message that comes through when you read the accounts of Prof. Rao in this special issue. [9] After the etiologies, there are excellent articles that deal with advanced imaging of the choroid using EDI-OCT and OCTA. Lastly, there are articles that deal with immunosuppressive therapies with drugs and biological agents, microincision vitrectomy in uveitis, and updates from commonly encountered uveitis entities such as tubercular uveitis, human immunodeficiency virus-associated uveitis in the highly active antiretroviral therapy era, post fever retinitis, viral uveitis, and drug-induced

Finally, after going through this content-rich issue on ocular immunology, inflammation, and uveitis, you will realize that determining the etiology of uveitis is often an educated guess, the diagnosis is presumed at times, there are a lot of systemic associations to think about, and the treatment regimens require participation by rheumatologists and other physicians. Uveitis specialists, in addition to being astute observers of clinical signs and symptoms, are also adept at interpreting complex laboratory tests, systemic imaging, polymerase chain reaction reports from ocular fluids, ophthalmic pathology, and clinico-pathological correlations. In addition, uveitis specialists are probably unique among ophthalmologists as they handle systemic associations and matters of life and death, which most of us are not accustomed to dealing with. They are also the ones who go out of the way to make a diagnosis, take greater risks for the benefit of their patients, and expertly manipulate the immune system to manage the disease. There are very few who take up uveitis as a subspecialty focus, given the intricacies and commitments required. We hope that more would take up uveitis fellowships in the future to boost our capabilities in uveitis management and research. Uveitis should duly emerge as one of the major stand-alone subspecialties in ophthalmology in India.

In conclusion, uveitis management has progressed far beyond just administering steroids and involves a methodical search for the underlying etiology of disease, including microbiology, immunology, molecular diagnostics, and imaging biomarkers. This special issue gives you a comprehensive overview and excellent insights into the current practices of uveitis, its future directions, cutting-edge research in this subspecialty, and much more. We hope you will enjoy reading the articles and some of this knowledge may help you in managing your uveitis patients better.

## Sabyasachi Sengupta, Santosh G Honavar<sup>1</sup>

Associate Editor, Indian Journal of Ophthalmology, Future Vision Eye Care, Mumbai, Maharashtra, ¹Editor, Indian Journal of Ophthalmology, Centre for Sight, Hyderabad, Telangana, India. E-mail: santosh.honavar@gmail.com

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Access this article online	
Quick Response Code:	Website:
	www.ijo.in
	<b>DOI:</b> 10.4103/ijo.IJO_2691_20

Cite this article as: Sengupta S, Honavar SG. Exploring a New Era in Uveitis. Indian J Ophthalmol 2020;68:1721-2.