Spectral Domain Optical Coherence Tomography in Macular Diseases, Eds: Carsten H. Meyer, Sandeep Saxena, Srinivas R. Sadda 2017 443pp., ISBN: 978-81-322-3608-5 Springer India

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The publication of “Spectral Domain Optical Coherence Tomography in Macular Diseases” is the most recent souvenir for the ophthalmology community, that insightfully bridges the interests of clinicians, retina specialists, and experts in imaging. Such a contribution simply cannot be overlooked by anyone who wishes to stay current with developments in the field.

The list of authors is a collection of irrefutable experts and their associates in the imaging field. The “Preface” and “Introduction” of the book thoughtfully summarize advances in macular imaging and carefully outline the present status of the technology. Following that, the book is clearly conceptualized into several parts.

“Essentials of the optical coherence tomography” explains the basics and principles of technology and abilities of instruments to capture images and present its components for interpretation. En face optical coherence tomography (OCT) and swept source OCT are characterized, and clinical examples are presented. Optical coherence tomography angiography is described along with its increasing role in diagnosing macular diseases. Hyperspectral imaging is introduced to readers, and the concept of OCT imaging biomarkers is highlighted along with their future significance for disease monitoring, prognosis, and treatment response.

“Medical retina” covers an extensive area of clinical practice with detailed analysis of each disease entity. Particular attention is paid to diabetic macular edema and its management, retinal artery and vein occlusions, age-related macular degeneration, polypoidal choroidal vasculopathy, macular telangiectasia, and central serous chorioretinopathy.

“Surgical retina” focuses on the role of imaging in macular surgery both in emmetropic and myopic conditions. Characteristics of both pre- and post-operative OCT vitreoretinal condition, macular (pseudo-) and lamellar holes, and traumatic conditions are analyzed.

“Miscellaneous” part includes most interesting spectral OCT images on inherited retinal conditions, rare ocular conditions, both infectious and non-infectious uveitis, and ocular tumors.

“Intraoperative optical coherence tomography” summarizes developments in the rapidly evolving application of OCT imaging in the operating theater. Global advances in technology are described along with advantages of real-time imaging during both anterior and posterior segment surgeries.

The main strengths of this book include an unparalleled collection of unique images with a high accuracy of interpretation, full coverage and detailed explanation of the topic by experts, and up-to-date knowledge of the field. Perhaps a weakness is minor redundancy of disease entities in different chapters by different authors. Even so, much of the disease redundancy may be beneficial and provide complementary context in the long run.

In summary, this book is well suited for clinicians, clinical scientists, imaging experts, and anyone interested in OCT technology development. It is an inspirational work by dedicated authors who should be credited for their hard work resulting in a broadened and masterful cross-sectional perspective on current OCT knowledge.

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