

Introduction to SSOCT and SS OCT Angiography

Richard F. Spaide, MD

Vitreous, Retina, Macula Consultants of New York, USA

Optical coherence tomography (OCT) uses an ingenious method to accurately image volumes of tissue. Successive waves of improvement in OCT have produced a stream of better, faster instruments to image structure of tissue and its behavior. The technology is available to physicians around the world. The diagnosis and treatment of retinal diseases is undergoing an imaging led transformation, not by a select group of limited access but by thousands of physician-researchers around the world. OCT is a disruptive technology that with successive advancements is disruptive to itself. Commercially available time domain instruments were displaced by spectral domain only to be at the verge of being overcome by swept source implementations, all in a period of a few decades. Understanding the imaging technology is the first step in gaining an appreciation of its ability and to be able to anticipate future changes that will likely occur. Simple structural cross-sections are being augmented by blood flow imaging and more complex methods of displaying data. This presentation will present an overview OCT technology and then illustrate OCT angiography. Finally, simple details found with OCT will be used to highlight a new method of classifying age-related macular degeneration.