



Editorial to the OCT Angiography in Glaucoma series

Optical coherence tomography angiography (OCT angiography) applied for glaucoma research and glaucoma patient management is one of the highest ranked and most rapidly developing area of ophthalmology. While OCT technology has been widely used in clinical practice for more than two decades OCT angiography reached clinical applicability only less than five years ago. It is now possible to objectively and reproducibly measure capillary perfusion in the retinal nerve fiber layer, the inner macular retina and the optic nerve head, all of which are essential in the glaucomatous structural damage and its progression. It has been shown that in these structures capillary perfusion is reduced in most forms of glaucoma, and in primary open-angle glaucoma (in which vascular dysregulation plays an important pathophysiological role) its measurable reduction precedes and predicts structural damage. Several important questions regarding OCT angiography, however, are under investigation. Therefore the review articles published in current series cover several essential and currently under investigation research areas. The reviews are important for all clinicians dealing with glaucoma patients, researchers working on any of the chronic progressive neurodegenerative diseases one of which is glaucoma, and those engineers, mathematicians and physicists whose research involves clinical aspects.

In the first paper Holló reviews the research aspects and clinical applicability of the vessel density—visual field sensitivity relationship. The second review by Fard and Ritch provides detailed information on the role of OCT angiography in glaucoma detection and evaluation of glaucoma progression, and on the relationship of the various OCT angiography parameters to the spatially corresponding structural parameters. Finally, Tan *et al.* provide an extensive review on the different approaches of the quantification of the various OCT angiography metrics. This review is particularly important for all researchers, physicists and engineers working on ocular perfusion, ocular imaging and OCT angiography. As the Guest Editor of this series I am convinced that all readers with an interest in ophthalmology will usefully utilize the information summarized in the above reviews.

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