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Editorial

A New Perspective in the Fundus Exploration

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The peripheral retina is the area of the retina outside the macula, defining midperiphery as region of retina up to the posterior edge of the vortex vein ampulla and far periphery as the zone of retina anterior to the vortex vein ampolla [1]. An important number of eye diseases can affect the peripheral retina as retinal tears, vasculitis, uveitis and diabetic retinopathy with a high prevalence of peripheral diseases in aging eyes [2]. Photographic documentation is of great importance for educational and medico-legal purposes. The gold standard for fundus imaging, especially in diabetic retinopathy, have been the images captured with 50 degree cameras. Imaging of the peripheral retina has significantly improved: Ultra-widefield (UWF) imaging is the latest technology in the evolution of fundus documentation. With the ability to capture up to 200° (up to 82% of the retinal surface) of the fundus with a single, noncontact digital image, far peripheral retinal pathology can be imaged [2]. UWF fluorescein angiography (FA) imaging obtaining high-quality fundus fluorescein angiography [3]. UWFFA is successfully performed in children. The studies have shown the potential of UWF imaging to improve detection and management of retinal periphery pathology [4-6]. The potential of UWF imaging to improve the diagnosis and management of diabetic retinopathy (DR) is well documented [4]. The UWF does not replace the peripheral retinal exam, but it facilitates this examination by providing a pan-retinal overview. UWF imaging often reveals pathology that might be overlooked during the clinical exam as ischemic in carotid artery stenosis, hypertension, retinal vascular disorders and DR [4-7]. With UWF patients at risk for vision loss that otherwise could have been lost using routine fundus photography are identified. The integration of UWF retinal imaging give more relevant information and faster (image captured in 30 seconds) allowing better diagnoses, treatments and classification of pathologies [6]. I believe that UWF imaging technology will be indispensable for the routine daily retina practice.

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