



Ultra-wide-field fundus imaging of acute retinal necrosis: clinical characteristics and visual significance

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Examination of the far periphery of the retina can be taxing for the ophthalmologist. However, clinical signs of some gravity take hold in these areas and lead to visual loss that has long-term effects. A daily case is a retinal tear due to posterior vitreous separation. Unseen at examination, the tear evolves into a retinal detachment.

In a third of eyes with acute retinal necrosis, Lei et al. saw that the early foci of retinitis were in the far retinal periphery [1]. They added that these peripheral signs can be missed where the retina is not examined carefully. Thus, the underserved patient suffers the advance of a sight-robbing retinopathy.

Lei et al. charted the course of viral retinitis with an ultra-wide-field system for imaging the fundus. Popularised in the last decade, the widefield cameras do not feature among the kit of ophthalmologists everywhere. Typically, a doctor has only the slit-lamp for viewing the elusive margins of the retina.

Upholding the art of clinical method, it can be said that widefield contact-lenses offer major assistance where a scrutiny of the retinal peripheries is warranted. Exemplified by the SuperQuad lens, these contact-lenses are not used as often in clinic as they might. A widefield lens stabilises the eye, gives a stereo-overview of the fundus, and allows a brighter illumination of the retinal surface. Priced thriftily and sourced from the USA, the Katena Diamond 200 Lens is quoted to visualise the farthest regions of the retina.

Beside the SuperQuad's 160° field-of-view, the Katena optic captures a panorama of 200°. Usefully, before a stubborn mid-dilated pupil, a widefield contact-lens can open a view to the fundus. Also, the light beam can be angled to study the posterior vitreous.

A well-lit overview assists detection of lesions in the far periphery and, moreover, in the diagnostic cascade, it aids the recognition of clinical patterns in the vitreoretinal segment. Once comfortably sat at the slit-lamp, the applying of a widefield lens should not be cumbersome for doctor or patient. Contact funduscopy can in fact be used more regularly than assumed. New-styled imaging yields fresh insights, no doubt, but old-styled clinical rigour remains key to ophthalmic practice.

Compliance with ethical standards

Conflict of interest The author declares no conflict of interest.

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