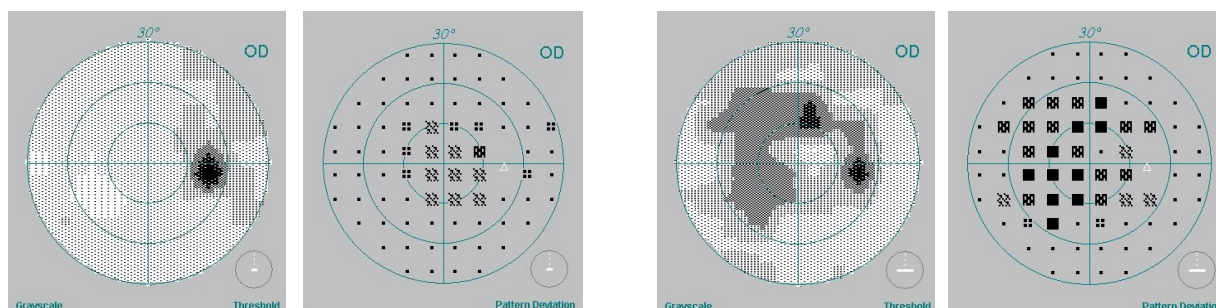


## ☒ | A dry eye can hamper visual field test interpretation

### ***The Science behind the Tip***

During visual field (VF) testing the cornea of patients with severe dry eye condition can get dry to such an extent as to hamper VF test interpretation and to cause patient discomfort after the testing. When the test shows an atypical depression, i.e. one that does not respect the horizontal meridian and/or has a rather central location in any quadrant (Figures), slit lamp examination can reveal pronounced punctate epithelial keratopathy. The fact that patients concentrate and tend to avoid blinking during the test may bring this on.

*Two examples of depressions due to a dry eye (right eyes, gray scale and pattern deviation maps)*



It is recommended to check for dry eye on slit lamp examination before the VF test, so that the patient can be advised to blink frequently during the test. The instillation of anaesthetic drops, for example when used for Goldmann applanation tonometry, is to be avoided before the VF test. Inspection of the optic disc however is best done before the VF testing because a hazy dry cornea may render such inspection impossible afterwards.

It has been reported that artificial tear administration in patients with dry eye can improve VF indices<sup>1</sup>.

### ***References***

1. Yenice O, Temel A, Orüm O. The effect of artificial tear administration on visual field testing in patients with glaucoma and dry eye. *Eye (Lond)*. 2007;21(2):214-7.

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