A 39-year-old man with known history of migraine experienced an episode of right-sided headache and visual disturbances. Visual field testing using automated perimetry was carried out during the episode and showed an incongruous homonymous hemianopia (Fig. 1a). The migraine episode lasted for about 30 min and upon resolution, repeat perimetry showed normal visual fields (Fig. 1b).

Homonymous hemianopia during a migraine attack has been described, but this is the first illustrative image in medicine showing the effect and its resolution. Much debate still exists regarding the pathophysiology of migraines. The transient nature of the field defect in this case supports the role of vasospasm with neurological defect reflecting an area of vascular compromise that is fleeting and resolves with resolution of the vascular flow.1

The Humphrey visual field analyser is one of the most common automated, computerized, static perimetry devices used to measure visual field defects. The grey scale (the four outer images in Fig. 1) represents an overview of the visual loss, but is not sensitive enough to provide information on the extent of visual field loss. The pattern deviation (the four middle images in Fig. 1) corrects for generalized depression of the field, for example, due to cataracts, to show focal areas of relatively greater...
visual field loss. In this case, the pattern deviation suggests the incomplete homonymous nature of the defect, which cannot be appreciated by looking at the grey scale alone, and therefore implies a retrochiasmatic lesion.

A homonymous hemianopia can be congruous when the areas of visual defects of the two eyes match exactly. Generally, the more posterior the lesion in the optic pathway, the more congruous the visual field defect. Conversely, in incongruous hemianopias the degree of visual fields defect differs between the two eyes, as seen in this case (Fig. 1a, dashed circles) where the right pattern deviation showed more extensive and severe involvement. The incongruous nature in this case suggests pathology affecting the optic tract supplied by the left anterior or lateral choroidal artery.

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References