has called for more investment in training clinical coders.

In conclusion, clinical coding is a valuable tool, but to be so it needs to be reproducible and accurate. Although clinical coders usually carry out coding, all healthcare professionals have a responsibility to ensure that coding is as accurate as possible.

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Sir,

Delayed, rapid visual field loss in a patient after ten years of vigabatrin therapy

Vigabatrin is associated with the development of visual field loss (VFL) in 25–50% of patients.[1] VFL is suggested to be stable with continued use of vigabatrin.[2,3]

Case report

A 36-year-old female receiving 3000 mg/day of vigabatrin since 1992 as add-on therapy for partial epilepsy was referred in 1998 for visual field (VF) monitoring. At the time of referral the patient had no visual complaints, visual acuity was 6/6 in both eyes, colour vision and discs were normal.

Serial assessment between 1998 and 2008 using Goldmann kinetic perimetry showed a rapid deterioration in VFs between assessments a year apart between 2002 and 2003, after 10 years of vigabatrin therapy and earlier stable VFs (Figure 1).

The best corrected visual acuity and colour vision have not changed over the 10-year assessment period. Visual evoked potentials and full field flash electroretinograms carried out in 2003, 2006, and 2007 were within normal limits, although a mild deficit in cone system function was suggested on all three occasions. Fundus photographs in 2006 showed disc pallor. Imaging of the retinal nerve fibre layer using optical coherence tomography, undertaken in 2007 and 2008, showed thinning with sparing of the temporal quadrant (Figure 2) and did not change over a 1-year period. Other potential ophthalmological or neurological causes for the VFL were excluded.

In 2007 the patient was registered as severely sight impaired. Multiple attempts to withdraw vigabatrin

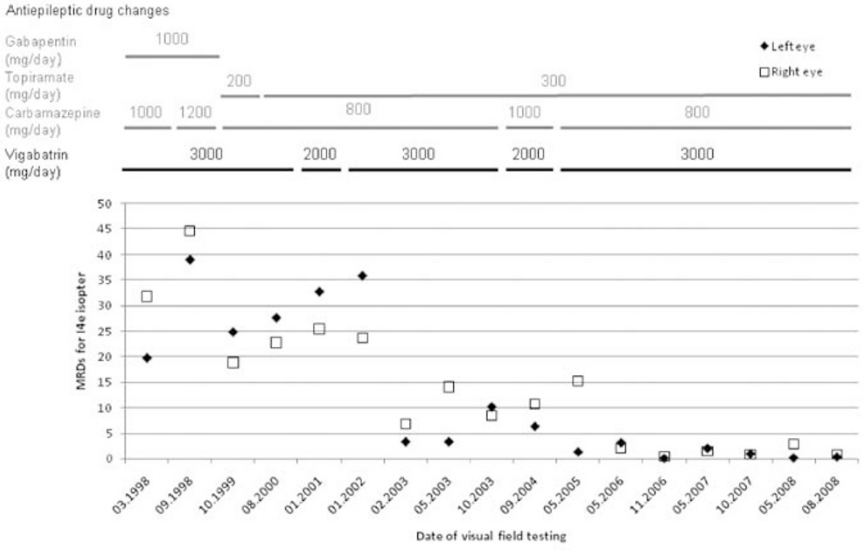

Figure 1 Graph showing change in mean radial degrees (MRDs)[2] using 14e isopter for the right and left eye over a 10-year period of continued vigabatrin use. Anti-epileptic drug changes over the same period are also shown. A deterioration is seen between test sessions in 2002 and 2003.

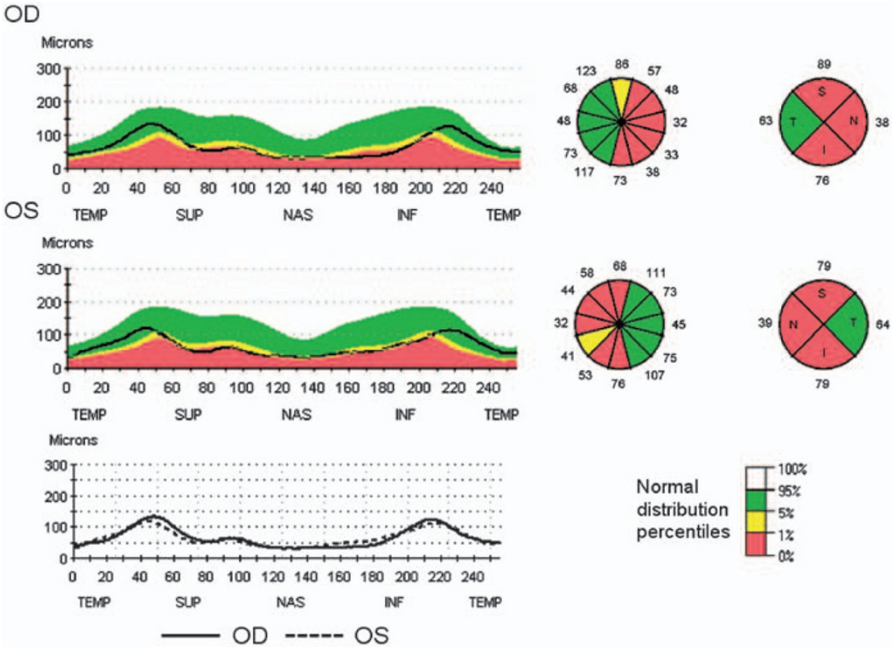

Figure 2 Retinal nerve fibre layer thickness average analysis report for both eyes taken from a fast retinal nerve fibre layer scan using optical coherence tomography. The analysis shows bilateral and symmetrical thinning of the retinal nerve fibre layer with relative sparing of the temporal quadrant.

have resulted in exacerbation of seizures and thus the patient has elected to continue with vigabatrin therapy despite the VFL.

Comment

Onset of VFL after initiating vigabatrin has been reported as early as 6 weeks,[4] but commonly becomes evident within the first few years.[4,5] Prospective studies of patients with established vigabatrin-associated VFL suggest that the field defect is stable and irreversible and does not progress further with continued treatment.[2,3] However, observation periods are usually shorter than the one reported here. On the basis of this evidence, guidelines from the Royal College of Ophthalmologists suggest six monthly visual field screening for the first 5 years of treatment and yearly screening thereafter.[6]

The case reported here shows that severe VFL can occur after many years of treatment and earlier stable visual function. This may suggest that yearly screening in those patients who continue to take vigabatrin for more than 5 years may not be sufficient to detect rapid changes in VFs. Additional, long-term observational studies are needed to further elucidate the nature of vigabatrin-associated VFL.

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