Eye (2003) 17, 545–548

www.nature.com/eye

Sir,

Homonymous hemianopia and driving

With interest we read the letter by Mukherji and Burgess, in the May issue 2002 of *Eye*, pp 321–322.

From experience, we know that attributing visual field loss to a certain cause may be a cumbersome procedure[1] especially as in their Case 2 where no abnormality was found on neurophthalmologic examination. We might have liked to see a note or fundus picture, ruling out, for example, tilted discs. Did they test in Case 1 the full field or only the central one?

The main reason why we are writing to you is that we were struck by the apparent automatism by which a 35-year-old woman with right homonymous hemianopia was taken off the road by the Driver and Vehicle Licensing Agency. According to the case report, she was not aware of her field defect and had no driving problems. We assume that she passed without problems her driving licence exam with the same defect.

In order to instigate a change in the European and national directives, research by the CBR (the Netherlands Driving Licence Authority) was started amongst 63 persons with serious visual field defects (in particular, homonymous hemianopia). The procedure was to test the visual field carefully, and in this way often 5–10° sparing of the macular field on the hemianopic side was found. Furthermore applicants were checked if there were any concomitant disorders, in neurophthalmic cases by a neurologist too. If not, these people were referred to the department of the CBR specialized in evaluating disabled drivers by trained examiners according to a specific protocol. There they had to undergo a practical driving test in a normal car on the public road of approximately 1 hr in different traffic conditions. Medical approval was given to those people who thus had proven that they could function as an adequate driver.

The results were that the second European directive (1991),[2] implemented by all member states in 1996, offers more possibilities for drivers with field of vision disorders, a success for The Netherlands and Belgium who made out a case for this. The council directive of 29 July 1991 stipulates in annex 111: 'Driving licences (group 1, passenger cars) shall not be issued or renewed if, during the medical examination, it is shown that the horizontal field of vision is less that 120°, apart from exceptional cases duly justified by a favourable medical opinion and positive practical test'.

In the Netherlands, there are now over 300 drivers with right- or left-sided hemianopia. Remarkably, in daily practice, it does not seem to matter on which side this is—this given the fact that in the Netherlands drivers have to give priority to traffic from the right on an equal road crossing and that with right-hand driving one has to scan oncoming traffic on the left side when overtaking a car. With adequate compensation mechanisms, among others more scanning eye and head movements, these people drive as well as most other drivers.

As there is a lack of good literature showing the association between visual field loss and crash involvement,[3] we would recommend, especially for such a young subject as Case 1, a finer tuning procedure.

References

1 Ramrattan RS, Wolf RC, Panda-Jonas S, Jonas JB, Bakker D, Pols HA *et al*. Prevalence and causes of visual field loss in the elderly and associations with impairment in daily functioning: the Rotterdam Study. *Arch Ophthalmol* 2001; **119**: 1788–1794.

2 Council of European Communities. Minimum standards of physical and mental fitness for driving a power-driven vehicle. Council directive of 29 July 1991 on driving licences (91/439/EEC) Annex 111, 1991.

3 Owsley C, McGwin G. Vision impairment and driving. *Surv Ophthalmol* 1999; **43**: 535–550.

PTVM de Jong[1,2,3] and HH Warmink[4]

[1]The Netherlands Ophthalmic Research Institute
KNAW, Amsterdam

[2]Department of Ophthalmology,
Academic Medical Center, Amsterdam

[3]Department of Epidemiology and Biostatistics
Rotterdam

[4]KLM Aeromedical Institute, Schiphol Airport
Amsterdam, The Netherlands

Correspondence: Dr PTVM de Jong
Department of Ophthalmogenetics
Meibergdreef 47
1105 BA Amsterdam
The Netherlands
Tel: +31 20 5664588
Fax: +31 20 5669050
E-mail: p.dejong@ioi.knaw.nl

Eye (2003) **17,** 545. doi:10.1038/sj.eye.6700395

Sir,

Reply: Homonymous hemianopia and driving

We read with interest the comments of Dr de Jong and his colleague on 'Visual field defects in adults secondary to preterm delivery'.

I can confirm that Case 1 had both a central 24/2 Humphrey visual field and the standard DVLA binocular Esterman visual field test. As you mention, Case 1 passed her driving test without being aware of any field defect. With regard to Case 2, I am unable to trace any disc photographs. I was in touch with the DVLA and their ophthalmological advisers regarding Case 1 and can report that her driving licence was returned to her approximately 6 months ago, after a great deal of negotiation.

We hope that the recent modifications in field standards proposed by the DVLA, dated 7.7.02, will reduce the risk of peremptory loss of licence and livelihood in the future.

SEP Burgess

Princess Margaret Hospital
Okus Road, Swindon
Wiltshire SN1 4JU
UK

Correspondence: SEP Burgess
Tel: +44 1793 536 231
Fax: +44 1793 480 817
E-mail: karen.whaymand@smnhst.swest.nhs.uk

Eye (2003) **17,** 545–546. doi:10.1038/sj.eye.6700394

Sir,

Congenital nasolacrimal duct obstruction requiring external dacryocystorhinostomies in a child with foetal valproate syndrome

Congenital nasolacrimal duct (NLD) obstruction is usually an isolated defect, but may be associated with craniofacial abnormalities. We present a case of bilateral congenital nasolacrimal duct obstruction treated by external dacryocystorhinostomy (DCR) in a 15-month-old child with foetal valproate syndrome. Multiple ocular associations with foetal valproate syndrome have been reported including strabismus, myopia, nystagmus, epicanthic folds, infraorbital creases and dry eye, but nasolacrimal duct obstruction has not previously been reported.[1,2]

Case report

A 15-month-old boy with dysmorphic features presented to the eye department with recurrent eye infections. Ocular examination was normal, and refraction showed myopic astigmatism and anisometropia. Syringing and probing of the tear passages under general anaesthetic confirmed the presence of bilateral lacrimal sac mucocoeles with bony nasolacrimal duct obstruction at 28 mm from the puncta in the right and 25 mm in the left. A dacryocystogram confirmed dilated lacrimal drainage systems bilaterally. Bilateral external DCRs without tubes produced a complete resolution of his symptoms. Figure 1 shows the patient following the right DCR and before the left DCR.

He was born at 32 weeks gestation with a birthweight of 1.69 kg. His mother had epilepsy (treated with sodium valproate), smoked cigarettes, and was a nondrinker. On examination he was found to have hypotonia, developmental delay, and dysmorphic facial features including a broad nasal bridge, congested face, narrow palpebral fissures, low-set ears and redundant skin folds on his forehead (Figure 1). He also had bilateral clinodactlyly, single palmar creases, bilateral undescended testes, hypospadius, broadly spaced second and third toes, and a large atrial septal defect with pulmonary artery stenosis. Evaluation for chromosomal aberrations, inborn errors of metabolism, and congenitally acquired infections was unremarkable. A clinical geneticist diagnosed foetal valproate syndrome.

Comment

Congenital NLD obstruction is a common clinical problem affecting 5–6% of newborns, many of which

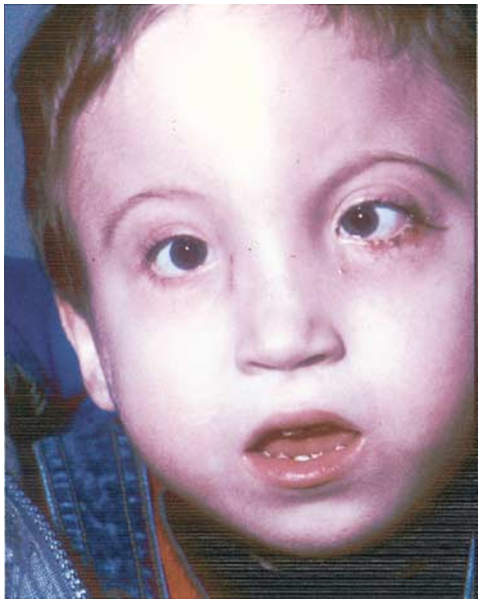

Figure 1