

resolve spontaneously by the age of 12 months.<sup>3</sup> The lacrimal outflow system begins to develop early in embryogenesis, and genetic or environmental factors (teratogens, eg sodium valproate) that influence the development at this stage are likely to result in lacrimal disorders.<sup>4</sup> Sodium valproate is a popular anticonvulsant drug because of its broad range of anticonvulsant effects and relative freedom from sedative and behavioural effects. It is also a teratogen shown to cause neural tube defects in animals, which are prevented by folic acid supplementation. A distinctive dysmorphic syndrome is seen in some cases in humans.<sup>5</sup> The proportion of infants affected when the mother is on monotherapy is said to lie between 2.5 and 10%. There seems to be a genetic predisposition to teratogenic effects of valproate, and the recurrence risk to siblings of an affected child seems to be greater. The craniofacial features consist of brachycephaly with a high forehead, shallow orbits, and prominent eyes. The eyebrows are thin or 'neat'. There is said to be an unusual fold of skin below the lower eyelid. The mouth is small, the upper lip long and thin, and the lower lip prominent.<sup>6</sup>

Epiphora is common in children with craniofacial syndromes and may be due to soft tissue abnormalities (such as lateral displacement of the medial canthi or displacement of the puncta) or bony abnormalities (such as maxillary hypoplasia).<sup>7</sup> For the paediatric patient with abnormalities of the lacrimal drainage system that do not respond to probing or other less invasive methods, DCR may be performed with minimal morbidity and a high degree of success, particularly in the absence of canalicular disease (96% in a large series by Hakin *et al*<sup>8</sup>). When planning surgery, the expected benefits must be weighed against the possible anaesthetic risks in these children who frequently have systemic abnormalities as in this case.<sup>9</sup> The surgical failure rate in children is not significantly higher in adults and the causes of failure are the same. The success rate in children with developmental anomalies was 94% in a large series, which was better than in children with infections (88%), trauma (89%), and functional epiphora (50%).<sup>9</sup>

## References

- 1 Glover SJ, Quinn AG, Barter P, Hart J, Moore SJ, Dean JC *et al*. Ophthalmic findings in fetal anticonvulsant syndrome(s). *Ophthalmology* 2002; **109**: 942–947.
- 2 Boyle NJ, Clarke MP, Figueiredo F. Reduced corneal sensation and severe dry eyes in a child with fetal valproate syndrome. *Eye* 2001; **15**: 661–662.
- 3 Yeatts PR. Current concepts in lacrimal drainage surgery. *Curr Opin Ophthalmol* 1996; **7**: 43–47.
- 4 Langman J. *Medical Embryology*. Williams & Wilkins: Baltimore; 1976.
- 5 Winter R, Baraitser M. *London Dysmorphology Database*. (2.10). 2-5-1998. University Press, Electronic Publishing: Oxford.
- 6 Clayton-Smith J, Donnai D. Fetal valproate syndrome. *J Med Genet* 1995; **32**: 724–727.
- 7 Hicks C, Pitts J, Rose GE. Lacrimal surgery in patients with congenital cranial or facial anomalies. *Eye* 1994; **8**: 583–591.
- 8 Hakin KN, Sullivan TJ, Sharma A, Welham RAN. Paediatric dacryocystorhinostomy. *Aust NZ J Ophthalmol* 1994; **22**: 231–235.
- 9 Welham RAN, Hughes S. Lacrimal surgery in children. *Am J Ophthalmol* 1985; **99**: 27–34.

SJ Hornby and RAN Welham

Department of Ophthalmology  
Royal Berkshire Hospital  
London Road  
Reading RG1 5AN, UK

Correspondence: SJ Hornby,  
Tel: 1993 810857  
E-mail: stella.hornby@virgin.net

*Eye* (2003) **17**, 546–547. doi:10.1038/sj.eye.6700371

Sir,

### Primary retinal detachment surgery

We read with interest the recent issue of *Eye* (July 2002) that included the papers of the Cambridge Ophthalmological Symposium on the various aspects of retinal detachment. In particular, the editorial by Scott<sup>1</sup> and the article by Asaria and Gregor<sup>2</sup> caught our interest.

It seems now an accepted practice that all retinal detachment surgery is performed in tertiary referral centres or by vitreoretinal surgeons carrying out surgery in district general hospitals. In this light, we would like to share with your readers the results of an audit carried out in a district general hospital on the outcome of primary retinal detachment surgery performed by general ophthalmologists. This audit coincidentally preceded a decision by the department to refer all patients with retinal detachment to the regional vitreoretinal centre when their services were established.

This retrospective audit included all the patients who underwent retinal detachment surgery in the hospital during a 5-year period ending in 1999. All of the 58 patients underwent conventional scleral buckling

surgery. The procedure involved cryopexy and placement of explants with or without subretinal fluid drainage. Air injection was carried out if necessary. In those patients who underwent repeat surgery, a similar surgical approach was adopted.

Successful reattachment was achieved in 47 eyes (81%) after one procedure. Repeat surgery in the department resulted in reattachment in a further five eyes. The overall anatomical success rate was thus 90%. In 10 patients who had retinal dialysis, the primary success rate was 100%. The visual acuity improved in 33 eyes (63.5%), remained unchanged in 11 eyes (21%) and was worse after surgery in eight eyes (15.5%). Primary surgery was not successful in 11 eyes of 11 patients, of whom one refused further surgery. Five patients had their retina reattached after further surgery within the department and five others were referred to the regional vitreoretinal unit.

Sullivan *et al*<sup>3</sup> suggest 75% to be a reasonable goal for primary success rate. Snead and Scott<sup>4</sup> question this recommendation and suggest that the goal should be nearer 90%. They quote their audit results, which showed that the results of surgery carried out by juniors improved from 78% operating alone to 94% when operating under consultant supervision.

The results of our audit suggest that these patients are likely to be a group of selected patients possibly with low-risk retinal detachments. This bias is likely to have resulted in the above good results. It is also less likely that specialist registrars of the recent years have undergone sufficient training to embark on specialised procedures like retinal detachment surgery. Evidence in the literature also suggests that the results are likely to be better if all retinal detachment surgery is carried out in a vitreoretinal unit.<sup>5</sup> The current practice of the department in referring all patients with retinal detachment to the

regional vitreoretinal centre is likely to benefit the patients and ensure good anatomical and visual outcome.

## References

- 1 Scott JD. Future perspectives in primary retinal detachment repair. *Eye* 2002; **16**: 349–352.
- 2 Asaria RHY, Gregor ZJ. Simple retinal detachments: identifying the at-risk case. *Eye* 2002; **16**: 404–410.
- 3 Sullivan PM, Luff AJ, Aylward GW. Results of primary retinal reattachment surgery: a prospective audit. *Eye* 1997; **11**: 869–871.
- 4 Snead MP, Scott JD. Results of primary retinal reattachment surgery: a prospective audit, (letter). *Eye* 1998; **12**: 750.
- 5 Comer MB, Newman DK, George ND, Martin KR, Tom BD, Moore AT. Who should manage primary retinal detachments? *Eye* 2000; **14**: 572–578.

S Dinakaran<sup>1</sup>, SP Desai<sup>2</sup>, LR Kolli<sup>2</sup>, PJ Noble<sup>2</sup>  
and VV Kayarkar<sup>2</sup>

<sup>1</sup>Department of Ophthalmology  
Royal Hallamshire Hospital  
Sheffield S10 2JF, UK

<sup>2</sup>Department of Ophthalmology  
Doncaster Royal Infirmary  
Doncaster DN2 5LT, UK

Correspondence: S Dinakaran  
Tel: +114 2711 900  
Fax: +114 271 3682  
E-mail: sdinakaran@yahoo.com

*Eye* (2003) **17**, 547–548. doi:10.1038/sj.eye.6700406