believe the article published in your journal this year to be important; it serves as a warning of the less known aetiological possibilities of intermittent blurring of vision. Moreover the symptom of erythropsia seems to me very important and contributory to the correct diagnosis.

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References

1 Kosmorsky GS, Rosenfeld SI, Burde RM. Transient monocular obscuration–? amaurosis fugax: a case report. *Br J Ophthalmol* 1985; **69:** 688–90.
2 Manor RS, Sachs W. Spontaneous hyphema and vessel anomaly. *Arch Ophthalmol* 1975; **93:** 1056–8.
3 Fechner PV. Spontaneous hyphaema with abnormal iris vessels. *Br J Ophthalmol* 1958; **42:** 311–5.
4 Savir H, Manor RS. Spontaneous hyphema and vessel anomaly. *Arch Ophthalmol* 1975; **93:** 1056–8.

SIR, Any response to the query by Dr Manor about the possible association of pilocarpine usage and the occurrence of hyphaema in a group of such patients must be purely conjectural. Pilocarpine increases permeability and increases vasodilatation of iris vessels,[1 2] at least in experimental animals. If the new vessels in these patients were really fragile, one might suppose that there could be increased diapedesis of red blood cells and thus hyphaema, but the intermittency bespeaks a purely pharmacological effect. If pilocarpine is to be indicted, it would be more logical to suggest a mechanical stretching of vessels secondary to the effect of pilocarpine on the pupillary sphincter. On the other hand spontaneous bleeding from 'aneurysms of the iris' has been reported in a patient without any past surgical disorder.[3]

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References

1 Stocker FW. Experimental studies on the blood-aqueous barrier. *Arch Ophthalmol* 1947; **37:** 583–90.
2 Swan KC, Hart WM. A comparative study of the effects of mecholyl, doryl, eserine, pilocarpine, atropine, and epinephrine on the blood-aqueous barrier. *Am J Ophthalmol* 1940; **23:** 1311–9.
3 Dewar HA, Manson N. Recurrent monocular blindness. *Lancet* 1968; **i:** 533.

Spectacle prescribing among 10-year-old children

SIR, We enjoyed Stewart-Brown's recent article[1] and the associated editorial[2] on spectacle lens prescribing among 10-year-old children. We note the suggestion that spectacles may have been unnecessarily supplied to many children whose unaided visual acuity was apparently normal. Clearly any evidence for substantial overprescribing in any branch of the National Health Service deserves investigation, though Stewart-Brown rightly recognises the difficulty of assessing the extent of children's refractive problems on the basis of visual acuity measurements alone, particularly when these are made by a variety of personnel under necessarily ill-controlled conditions of measurement. It is of interest to note that this type of controversy is not new, since Donders[3] was, over a century ago, already discussing the desirability of prescribing spectacles for hypermetropes with asthenopic symptoms.

It seems to us, however, that other important issues besides possible overprescribing arise from the data presented by Stewart-Brown. Her Tables 1 and 3 show that, for example, at least 10% of those children with 'bilateral marked distant defect' (i.e., both monocular Snellen acuities worse than 6/24), 80% of those with 'bilateral near defect' (worse than 9 on the Sheridan Gardner test), and 7% of those with 'bilateral marked mixed defect' (worse than 6/24 in each eye at distance and worse than 9 in one eye at near) were unprovided with spectacles. These figures correspond to a total of about 200 children who, in a group that had probably received rather more regular and careful medical examinations than the bulk of their peers, still had possible marked deficiencies in vision without apparently having received refractive assistance. Although the acknowledged limitations of the data do not allow us to assert that the visual abilities of these children would necessarily have been usefully improved by spectacles, it seems reasonable to suggest that children whose visual needs remain unsatisfied may represent at least as disturbing a problem as the approximately equal number whose acuities appear normal and yet have received spectacles.

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References

1 Stewart-Brown S. Spectacle prescribing among 10-year-old children. *Br J Ophthalmol* 1985; **69:** 874–80.
2 Smith RJH. Editorial: Are their spectacles really necessary? *Br J Ophthalmol* 1985; **69:** 873.
3 Donders FC. *On the anomalies of accommodation and refraction of the eye.* London: New Sydenham Society, 1864: chapter 23.

SIR, Drs Charman and Jennings make an important point about the 1970 birth cohort data, presented in my paper on spectacle prescribing. There were indeed a group of children who would appear by available criteria to warrant spectacles who had not been prescribed them, and the discussion did not focus on these children.

They raise a question mark about two quite different groups of children. Those with a distant visual acuity of ≤6/24 in both eyes (categories 4 and 10) and those with a near acuity of ≤9 in both eyes with perfect distant vision (category 5).

In the first group there were between 19 and 22 children without spectacles. For some of these children there were legitimate reasons for this lack of spectacles. For example,

there were children with optic atrophy, macular degeneration, retinochoroiditis, and bilateral retinoblastoma who would not be expected to derive much benefit from spectacles; there were also ESN(S) children and severely emotionally disturbed children, for whom there may have been valid non-optical reasons for withholding spectacles. A detailed analysis of reasons for lack of spectacle prescription among all children in this group had not been undertaken when the paper was published, and I felt therefore it would be inappropriate to make a comment about this group. Some of these data have now been analysed and will be submitted for publication in a further paper.

The second group of children whom Drs Charman and Jennings comment upon are those with isolated near vision defects; only a small proportion of all the children in this group had been prescribed spectacles. I was not surprised to find a low prescription rate in this group, since screening for defective near vision is not common in schools,[1] and such children would therefore rarely be identified. This group was, however, the only one among children with defective vision in which an associated educational disadvantage that might be attributable to their untreated hypermetropia was detectable.[2] It is therefore a group which is worthy of comment and, indeed, further investigation.

Hypermetropia is very common in primary school children. It may be that these children would all benefit from spectacles, but it is important, before embarking upon such treatment policy, that a controlled trial be undertaken to establish exactly how spectacles could be of benefit. Such a study is currently being planned in the Department of Child Health Bristol and the Department of Ophthalmic Optics UWIST Cardiff.

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References

1 Stewart-Brown SL, Brewer R. The significance of minor defects of visual acuity in school children: implications for screening and treatment. *Trans Ophthalmol Soc UK* in press.
2 Stewart-Brown S, Haslum M, Butler NR. Educational attainment of children with visual defects. *Dev Med Child Neurol* 1985; **27:** 498–503.

Screening for visual defects in preschool children

SIR, As part of the general ophthalmic service in Ayrshire and Arran Health Board primary orthoptic screening has been offered to all children at the age of 3½ since January 1978. A preliminary report of this has been published.[1] The methods used are often similar to those described by Ingram *et al.*,[2] but are always non-invasive and differ from those used by Ingram *et al.* in other ways. For example, the Sheridan Gardiner test (seven letters) is used for testing visual acuity, and the Frisby test is used for testing stereo acuity. Both those tests can give very accurate results and are eminently suitable for mass screening. Virtually no defects are missed and the false positive rate is approximately 1·5%. Unlike Ingram *et al.*, we consider an acceptable visual acuity to have to be at least 6/6.

We are now in the process of assessing the first five years of screening for both clinical effectiveness and cost effectiveness.

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References

1 Cameron JH, Cameron M. Visual screening of preschool children. *Br Med J* 1978; **ii:** 1693–4.
2 Ingram RM, Walker C, Wilson JM, Arnold PE, Dally S. Prediction of amblyopia and squint by means of refraction at age 1 year. *Br J Ophthalmol* 1986; **70:** 12–5.

SIR, I did know about the Camerons' paper in 1978, but overlooked reference to it, for which I apologise. I will await with interest publication of both their results of treating defective vision identified at 3½ and their methods of assessing 'cost effectiveness.' I still believe that a nation-wide introduction of vision screening at 3½ should depend primarily on somebody being able to demonstrate that defective vision is more effectively treated if identified at 3½ than if it is left untreated until age 5+ (as at present).

I agree that the cost of any vision screening programme should also be considered, because we can no longer introduce a good idea just because it might be a 'good idea.'

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Atracurium and intraocular pressure

SIR, Murphy *et al's* paper on intraocular pressure (IOP) has just come to hand.[1] Their claim that the effect of atracurium had 'not hitherto been documented' is incorrect, as my coworkers and I studied and published[2] the effects of atracurium on IOP in 1984. It was nevertheless pleasing to see the results of our study independently corroborated.

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References

1 Murphy DF, Eustace P, Unwin A, Magner JB. Atracurium and intraocular pressure. *Br J Ophthalmol* 1985; **69:** 673–5.
2 Maharaj RJ, Humphrey D, Kaplan N, *et al.* Effects of atracurium on intraocular pressure. *Br J Anaesth* 1984; **56:** 459–63.

SIR, At the time of submission of our manuscript for publication there were no published reports on the effects of atracurium on intraocular pressure (IOP). Since that time two studies have been published apart from ours, that of Dr Maharaj *et al.*[1] and one by Tattersall, Manus, and Jackson.[2]