Doppler flowmeter examination.³ The possibility of using a noninvasive procedure to differentiate easily and accurately between ischaemic and nonischaemic testicular lesions is welcomed, and this method should soon become indispensable in cases of acute scrotum; it would certainly help to avoid unnecessary urgent operations in newborn infants and children.

References

- 1 Hitch D C, Shandling B, Lilly J R. Recognition of bilateral neonatal testicular torsion. *Arch Dis Child* 1980; **55**: 153-4.
- 2 Iuchtman M, Jacob E T, Wagner I, Berant M. Testicular torsion in the newborn. *Int Surg* 1976; **61**: 100-1.
- 3 Iuchtman M, Zoireff L, Assa J. Doppler flowmeter in differential diagnosis of acute scrotum in children. *J Urol* 1979; **121**: 221-2.

MIGUEL IUCHTMAN
Department of Surgery B,
Hadera Government Hospital,
Hadera, Israel

Dr Hitch and co-workers comment:

Neonatal testicular torsion mandates early recognition and surgery if hormonal secretion, let alone spermatogenesis, is to follow. We believe that neonatal testicular torsion is recognisable and with the advent of testicular scanning¹ it can easily be verified. Our preliminary experience with Doppler flow studies has been less encouraging. Further experience with these techniques is needed.

Reference

- 1 Hitch D L, Gilday D L, Shandling B, Savage J P. A new approach to the diagnosis of testicular torsion. *J Pediatr Surg* 1976; **11**: 537-41.

D C HITCH, B SHANDLING, AND J R LILLY
Department of Surgery,
Pediatric Surgery Section,
Oklahoma Children's Memorial Hospital,
PO Box 26307, Oklahoma City,
Oklahoma 73126, USA

Continuous sodium valproate or phenobarbitone in the prevention of 'simple' febrile convulsions

Sir,

Ngwane and Bower concluded their recent paper¹ with the recommendation that any child below age 18 months who presents with febrile convulsions should be treated

with either sodium valproate or phenobarbitone, but analysis of their paper gives only meagre evidence in support of this proposition. A recurrence rate of 1 in 18 for sodium valproate compared with 7 in 21 for the 'untreated' group, when the necessary correction for small numbers is applied, gives $\chi^2 = 3.1$ which is not significant (admittedly, Fisher's exact test gives $P = 0.03$ which is significant). No statistical test is given for the difference between a recurrence rate of 4 in 21 for the phenobarbitone group and 7 in 21 for the untreated group; in fact, with the correction for small numbers, $\chi^2 = 0.49$ which is not significant (and the exact test gives $P = 0.16$ which is also not significant). Moreover, an incidence of 7 recurrences out of 21 cases in the untreated group might be thought atypically high. Five recurrences out of 20 would be more in keeping with common experience, in which case the difference in favour of the phenobarbitone group for practical purposes vanishes completely.

Do these results really suggest that in preventing recurrence of simple febrile convulsions, either treatment (sodium valproate or phenobarbitone) is better than none? Perhaps this is so for sodium valproate, but for phenobarbitone a more scientific conclusion would surely be 'not proved'?

Reference

- 1 Ngwane E, Bower B. Continuous sodium valproate or phenobarbitone in the prevention of 'simple' febrile convulsions. Comparison by a double-blind trial. *Arch Dis Child* 1980; **55**: 171-4.

H MCC GILES
Department of Paediatrics,
Selly Oak Hospital,
Birmingham B29 6JD.

Dr Ngwane and Dr Bower comment:

When we applied a strict definition of 'simple' febrile convulsions in an attempt to obtain a uniform population, thereby reducing the numbers from 265 to 64, we realised that the small numbers would invite statistical argument. Nevertheless, we maintain that our recommendation that any child below age 18 months who presents with a febrile convulsion should be treated with either phenobarbitone or sodium valproate is validated by our results. We showed that the results for all treated subjects were statistically superior than for the untreated group ($P < 0.05$). The treatment was either phenobarbitone or sodium valproate, administered in a double-blind manner, and the results were similar in the two treatment groups. We agree that the difference between the results in the phenobarbitone and untreated groups is not significant, nor did we claim the contrary. There is strong evidence from previous work (discussed in our article) that phenobarbitone is more effective than nothing, and our trial was designed to discover if sodium valproate was as effective as phenobarbitone. Dr Giles surely has his

tongue in his cheek when he attempts to abolish statistical significance by substitution of a hypothetical number of recurrences for those which actually occurred. In fact, the recurrence rate in our patients was the same as that for 'simple' febrile convulsions in Wallace's series.¹

If he remains unconvinced of the efficacy of the two drugs perhaps the results of the larger series of Wallace and Aldridge Smith² will help to convince him. Admittedly in that study patients were chosen with defined 'at risk' factors which, with the exception of young onset, we excluded. Nevertheless their results are similar to ours.

References

- ¹ Wallace S J. Recurrence of febrile convulsions. *Arch Dis Child* 1974; **49**: 763-5.
- ² Wallace S J, Aldridge Smith J. Successful prophylaxis against febrile convulsions with valproic acid or phenobarbitone. *Br Med J* 1980; **i**: 353-4.

E NGWANE AND B BOWER
Department of Paediatrics,
John Radcliffe Hospital,
Headington, Oxford OX3 9DU