

number of experiments can be expected to proliferate. Such experiments should be driven by need. Do we need them?

- 1 Rylance GW, Woods CG, Cullen RE, Rylance ME. Use of drugs by children. *BMJ* 1988;297:445-7.
- 2 Done AK. The treatment of fever in 1982: a review. *Am J Med* 1983;74:suppl 27-35.
- 3 Camfield PR, Camfield CS, Shapiro SH, Cummings C. The first febrile seizure—antipyretic instruction plus either phenobarbital or placebo to prevent recurrence. *J Pediatr* 1980;97:16-21.
- 4 Goodman LS, Gilman A, eds. *The pharmacological basis of therapeutics*. 5th Ed. New York: MacMillan, 1975.
- 5 Volans GN. Antipyretic analgesic overdosage in children. Comparative risks. *Br J Clin Pract* 1990;44(suppl 70):26-9.
- 6 Lovejoy FH Jr. Aspirin and acetaminophen: a comparative view of their antipyretic and analgesic activity. *Pediatrics* 1978;62:suppl 904-9.
- 7 Yaffe SJ. Comparative efficacy of aspirin and acetaminophen in the reduction of fever in children. *Arch Int Med* 1981;141:286-92.
- 8 Watson PD, Galletta G, Branden NJ, Alexander L. Ibuprofen, acetaminophen and placebo treatment of febrile children. *Clin Pharmacol Ther* 1989;46:9-17.
- 9 Marriott SC, Stephenson TJ, Hull D, Pownall R, Smith CM, Butler A. A dose ranging study of ibuprofen suspension as an antipyretic. *Arch Dis Child* 1991;66:1037-42.

D P ADDY  
Dudley Road Hospital,  
Birmingham B18 7QH

#### Reply to the commentary by the authors

We are not proponents of any particular drug for children. We are, however, proponents of choice in prescribing for children and this choice should be well informed. The purpose of our study was to determine the minimum effective dose of ibuprofen for childhood fever, and the safety of this drug in this context, rather than to compare it directly with paracetamol, which others have done. Whether ibuprofen should have been granted a product licence as a childhood antipyretic is a decision for the Medicines Control Agency, which enforces the Medicines Act 1968.

The commentary states that paracetamol overdosage has not been a serious problem in children. However, in the reference quoted it is

stated that 'since the withdrawal of paediatric aspirin formulations, the incidence of accidental paracetamol poisoning in children appears to be increasing'.<sup>1</sup> Although hepatotoxicity and death are rare in children under the age of 5 years,<sup>2</sup> this is probably because children ingest smaller doses and present earlier for treatment than adults. If an entire bottle of paediatric ibuprofen suspension were ingested by a child aged 1 to 2 years, serious toxicity would be unlikely.<sup>1</sup>

The consideration that an antipyretic drug should relieve discomfort is an important one. Analgesia for children has perhaps not always been given the attention that it deserves. Ibuprofen has been used as an analgesic and anti-inflammatory drug in childhood arthritis for some time<sup>3</sup> and at much larger doses than in our study. Although fever may be seen by doctors as a trivial and common feature of childhood illness, the discomfort which accompanies febrile illnesses is very real to that child. It has been estimated that over 240 million doses of ibuprofen have been given to children. To try to improve the relief of pain is not to experiment, provided we adhere to the principle of *primum non nocere*. It is surely better that drugs used for children are subjected to the same scrutiny as those introduced for adults, rather than these drugs being absorbed into the paediatric formulary on an *ad hoc* basis, as has been the case with many other childhood treatments over the last decades. Perhaps if aspirin had been subjected to the same scrutiny, and the same surveillance after it was marketed,<sup>4</sup> the association with Reye's syndrome would have been detected before 80 years had elapsed?

- 1 Volans GN. *Pyrexia today; a symposium report. Education in practice*. London: Boots Company, 1989.
- 2 Meredith TJ, Newman B, Goulding R. Paracetamol poisoning in children. *BMJ* 1978;ii:478-9.
- 3 Ansell BM. Ibuprofen in the management of Still's disease. *Practitioner* 1973;211:659.
- 4 Rawlins MD, Jefferys DB. Study of United Kingdom product licence applications containing new active substances, 1987-9. *BMJ* 1991;302:223-5.