LETTERS TO THE EDITOR

Hypoglycaemia and hyperthermia due to nimesulide overdose

Editor—Although toxicity due to chronic administration of nimesulide has been reported,1 to the best of our knowledge there is no report about poisoning due to a single ingestion. We report a 20 month old boy who accidentally took a high dose of nimesulide; 40 mg/kg, 8 times the recommended daily dosage. We report a 20 month old boy who accidentally took a high dose of nimesulide; 40 mg/kg, 8 times the recommended daily dosage.

Physical examination was unremarkable. Laboratory findings, including hepatic and renal function, were normal, except for low to hypoglycaemia and acido-sis in managing acute nimesulide overdose.

3 Ritter A, Eskin B. Ibuprofen overdose present-
4 Taniguchi Y, Yohoyama K, Inui K, et al. Inhibi-
tion of brain cyclooxygenase-2 activity and the antipyretic action of nimesulide. Eur J Pharma-

Port-A-Cath use in refractory seizure disorders

Editor,—The use of a totally implantable venous access system (Port-A-Cath) in chil-
dren has become widespread in the last 15 years. We report a series of three children for whom the Port-A-Cath improved manage-
ment of their refractory seizures.

Two patients both females with a diagnosis of severe myoclonic epilepsy of infancy and recurrent status epilepticus presented in the first year of life. Both had seizures, which were intractable to multiple anticonvulsants and became refractory to benzodiazepines. Intravenous nimesulide was started with some success. Again venous access was difficult and a Port-A-Cath was implanted at 4½ years.

The most striking events in our patient were the development of hypotension and hyperthermia. Hyperthermia has been re-
ported due to non-steroidal anti-
flammatory drugs overdose,2 but hypo-
thermia due to the antipyretic action of nimesulide has not been reported. Nimesulide produces a dose dependent anti-
pyretic action in rats by inhibiting COX-2; but its effect under normothermic conditions is not known. Although it has been reported that nimesulide might be given to children with hypoglycaemia,1 it may cause hypogly-
caemia in high inges-
Maternal nutrition and pregnancy outcome

Editor,—Symonds et al raise interesting issues about the potential use of animal models in examining the impact of nutrition during pregnancy on future risk of adult disease.1 However, their discussion of recent epidemiological research in humans includes several important factual inaccuracies. The authors imply that our analyses and those of Godfrey et al2 implied that our analyses and those of several important influential studies have associated nutrition and pregnancy with depression. The outcome of specialist registrars in the southwest region

Editor,—The UK national directive is to ensure that consultant paediatricians numbers substantially over the next 5–10 years which requires the delivery of suitably trained doctors. Higher specialist training in paediatrics will take longer to train, both because of flexitime and also time out for maternity leave. Female trainees will take longer to train, both because of flexitime and also time out for maternity leave. Female trainees have chosen to work as part time consultants. This is precisely the analysis that was conducted. For information, figure 1 shows the relationship between maternal nutrition and birth weight. Whilst we find this behaviour fascinating, we do not find the data to be so unacceptable that they would propose a diagnosis of compulsive disorder. In six cases, the parents found their child to be bounding whilst also being more hyperactive. 

Nitrous oxide and vitamin B12

Editor,—The paper by Kanagasundaram et al on the use of nitrous oxide to alleviate pain and anxiety during painful procedures fails to mention the effect of this gas on cobalamin metabolism. Nitrous oxide inactivates cob(Alamin, the active derivative of vitamin B12, and essential cofactor for the transfer of the methyl group from methyltetrahydrofolate to homocysteine to form methionine. For subjects with good body stores of cobalamin this effect is unimportant, but no-one using this agent should remain unaware of the potential deteriorating complications in the nervous system of using nitrous oxide in subjects who are of borderline or deficient vitamin B12 status. Onset of subacute combined degeneration affecting the brain and spinal cord is a well documented event when individuals with low body stores of cobalamin are exposed to nitrous oxide.1 There is a long list of situations which put children at risk of cobalamin deficiency—for example, systemic malignancy or chemotherapy. Children with chronic conditions often need painful procedures, and depleted cobalamin stores may not be apparent unless measurements of serum B12 are made routinely. What is more, repeated use of nitrous oxide depletes the body stores of cobalamin even in well people.

Given the scale of use which would result from routine use of nitrous oxide in children undergoing painful procedures, there should be real concern about the potential for an accident in a child with occult cobalamin deficiency. The message must be: never forget vitamin B12 when thinking of using nitrous oxide.
EDITOR,—We read with interest the paper by designing the national service framework for years later. These issues need to be taken into the number of national training numbers there is a considerable discrepancy between and some are also specialty restricted. All are geographically restricted consultants awaiting a suitable post becoming total average training time is further ex- ing, lecturer posts, fellowships abroad, or training elsewhere as post-CCST PhD train- ant posts; 75% of the remainder have sought ated, or there are more trainees in research regions where more liberal policies are oper- ing, whilst it does save lives and I agree that the notional integrated management plan, which appears fective to be e- vident. Dr Unsworth writes regarding the over prescribing of adversities in our local community include two adrenaline injection does not always save the child’s life. We would suggest that when an adrenaline injection device is prescribed it must be demon- strated to both the parent and child (if the child is old enough). A dummy pen is helpful for this. Demonstration should be repeated with each repeat prescription of the device. The child and their family should always have a written management protocol, including instructions on expected symptoms, when to give antihistamine, when to call an ambulance, and when to give adrenaline. Such a protocol can then be passed rapidly to the community paediatric team to support the prompt training of school staff. It is worth remembering that clinical responsibility for the safe administration of a drug rests with the prescriber.

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Controversies in paediatrics?

EDITOR,—I was very disappointed to see that Unsworth¹ regards the over prescribing of adrenaline syringes. We are sure that we are the only community paediatric team who have similar concerns, although perhaps from a different perspective. Dr Unsworth writes of the safety issues. We have more experience of the practical problems.

Thanks to the availability of prompt training for school staff by community personnel, it is now rare for a child to actually be excluded from school because they have an adrenaline injection device. However, they may very well be excluded from other activities such as guide camp or trips abroad.

There is also the increasing problem of young people with adrenaline injection devices moving on to college or work places. Where should train staff there?

Other problems with adrenaline injection devices in our local community include two being lost on the bus, and one being acciden- tally fired into the interphalangeal joint of a child’s thumb with the needle becoming bent like a fish hook.

There is also the issue of keeping them in date. Parents often forget to renew them, particularly those kept in school. Whilst it does not need to be kept in a refrigerator, adrenaline does deteriorate in warm conditions, and injection devices should be checked to make sure the adrenaline inside remains clear and colourless.

Often, an adrenaline injection device has been prescribed with no demonstration to the child or family on how to give it, nor when to give it. Surely antihistamine should also be prescribed in every case? In most children, it is the only medication, which is going to be needed. How do they know when to give it? How do they know when to call an ambulance? They could easily make the mistake of trying to take a deteriorating child to hospital in their own car, instead of calling an ambulance or sending the child to a hospital, or even assuming that they do not need to do either and thus allow the child to die. We are concerned that adrenaline is used in a way which is “controversial” because the article is not a balanced review of the current state of allergy practice. The BPA and latterly RCPCH have championed for decades the holistic approach to the care of children. Paediatricians are best placed to assess the integrated needs of a child with medical problems. This principle is very relevant to developing areas of specialisation in which there is little or no supply of expert advice, such as in allergy. Paediatric allergists assess the impact of the diagnosis on many non-medical facets of a child’s life, including family lifestyle, integration into schools and peer groups, and the facilitation of appropri- ate independence from parental supervision. It is tiring to have to rehearse the arguments for the adequate protection of subjects at risk of anaphylaxis. Epinephrine (as all doctors should now be calling adrenaline) is not prescribed on the one hand given in clinic to families with an allergic child. It is part of the integrated management plan, which appears to be effective though difficult to measure.

It is very hard to prove that epinephrine saves lives and I agree that the notional “number needed to treat” with epinephrine to prevent a death from anaphylaxis is very high. Unsworth’s title suggests that this “very high number” (my phrase) is too high. How has he measured that? What is too many? He quotes a prevalence of about 1% of American children having peanut allergy. That is approxi- mately 3 million subjects. We do not restrict insulin syringes to just a few insulin dependent diabetics because diabetes is so common that we cannot adequately care for all of them. Every allergic child has the right to available care, which is not restricted to the first 100 through the clinic door (if they can find an allergy clinic).

Laparotomy will not save every patient with a leaking aortic aneurysm and epinephrine will not save every person who has anaphylaxis. Anaphylaxis is a critical situation in which prompt administration of epinephrine may (but occasionally may not) save a life. I think it unarguable that it is better to self treat and probably survive than not self treat and possibly die. Unsworth quotes one early paper about anaphylaxis from the US¹ and more recent British data. These papers all tell me more that anaphylaxis is only used due to unavailability or inappropriate training and patient confusion, rather than that epinephrine is useless or dangerous. Most subjects did not have epinephrine available because several of the deaths were anaphylaxis due to peanuts. The only medication which is going to be available is adrenaline, and those who are allergic to peanut, a food known to be associated with a risk of a severe allergic reaction. Doctors must remember epinephrine is prescribed to be available for response to infrequent exposure at an uncertain future date, not to be taken four times a day. I have referred to this in the past¹ as analogous to wearing a seatbelt in a car trip, every day, even though a serious car accident is unlikely on any individual day.

Unsworth is not up to date in his comments about the diagnosis of IgE mediated allergy. There are strong data from huge series of challenges, about the negative predictive values of the tests used in allergy clinics.¹² Unsworth does not even mention formal challenges, the cornerstone of modern food allergy practice. A child with an IgE mediated allergy would prescribe an epinephrine kit on the basis of a positive SPT in the absence of a significant history or formal challenge.¹⁴ Children and adults at risk of food related anaphylaxis have enough of life’s pleasures denied to them. The provision of epinephrine
EDITOR,—I was pleased to see that my article provoked lively discussion of this important issue. I am not surprised that many are concerned about poor compliance. I agree with Wolff and Runnery that adrenaline should never be the sole prescription. In addition to antihistamines, prednisolone has a place. The idea of a written management plan is valuable.

Hourihane contrasted prescription of adrenaline with provision of insulin syringes in diabetes mellitus. We do not restrict provision of insulin syringes in that context because to do so would inevitably mean that diabetics have hypoglycaemia and ill health in all cases, ranging from coma to retinopathy. The benefit risk ratio is clearly in favour of daily insulin use. By contrast, the “very high” number of adrenaline prescriptions required to (perhaps) prevent one fatal episode related to adrenaline usage (submitted for publication). Admittedly, all three were in adults. Hourihane prescribes “epinephrine” to “most (but not all) subjects who have reacted to peanut”. He also says that some patients do not get the prescription. Those with a previous history of only mild reactions can go on to suffer severe life-threatening reactions, so all should be advised that adrenaline will surely demand adrenaline. He would not prescribe adrenaline in the absence of a significant clinical history of true nut allergy, and (I applaud that) but others regrettably do, and I know from personal experience that once the mistake is made, it is hard to reverse. I like the seat belt analogy, but seat belts have few side effects. Regarding positive and negative predictive values of IgE based allergy blood tests, my point is that these tests are misleading: Patients with eczema, (a common finding in those presenting with possible nut or food allergy) typically have high background IgE levels and false positives are common.

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Arch Dis Child 2001 85: 510
doi: 10.1136/adc.85.6.510h

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