producing, identifying the cause of the EID and providing recommendations for a potential solution relieves that anxiety component which was likely to be a factor in seeking medical care and receiving inappropriate treatment in the first place.

In the study by Saer *et al*, one wonders if all eight children identified as having EIA actually had asthma as the cause of their EID since the diagnosis was based on an FEV₁ decrease $\geq 10\%$ but $< 15\%$ in six, decreases which may be within normal limits for non-asthmatics.³ In contrast to the 21% of children with no diagnosis for their EID, we were able to identify the cause of EID in all of our patients in whom full cardiopulmonary monitoring was performed in association with sufficient exercise to reproduce their symptoms.

Thus, while we certainly agree with Seear *et al* and the accompanying editorial that EIA is overdiagnosed, our experience would argue for exercise testing that reproduces the symptoms of EID during continuous cardiopulmonary monitoring for those whose history is otherwise atypical for asthma.

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Accident and emergency: a gateway to improve the management of atopic disease

We read the recent paper by Holgate and Lack¹ with much interest. The use of appropriate allergy testing with the aim of accurate diagnosis is of particular importance in the setting of increasing incidence of allergic disease.^{2,3}

We recently audited the impact of atopy on the workload within our paediatric A&E department; 14 369 episodes from a one year period were analysed. Presentations assigned a diagnosis of asthma, eczema, urticaria, angioedema, anaphylaxis, food allergy, drug allergy, or hay fever were felt to be related to atopy. Children under the age of 4 who presented with wheeze associated with a concurrent respiratory tract infection were assigned a diagnosis of viral induced wheeze and not included within the atopy grouping. Of these presentations, 811 (5.6%) were assessed as relating to atopy (fig 1).

We also compared the percentage of admissions and medical follow up between allergic presentations to A&E and non-allergic presentations. Not only did allergic conditions form a significant proportion of

Figure 1 Percentage of allergic presentations with respect to total episodes.

Figure 2 Comparison of National Health Service utilisation for follow up.

the department's workload, but a statistically significant higher proportion of these patients required admission ($p < 0.001$), outpatient follow up ($p < 0.01$), and general practitioner follow up ($p < 0.001$) when compared with the non-allergic population (fig 2).

The change in the pattern of allergic presentations (the atopic march) across the paediatric age range was evident, with eczema and food allergies being more prevalent in infants and young children and asthma becoming more prevalent in older children. There is evidence that early diagnosis and treatment of atopic disease prevents progression of the allergic march.⁴⁻⁶

With the above in mind, the recommendations from Holgate and Lack to utilise specific allergy testing may be useful as a follow up in children presenting to A&E with disease thought to be secondary to atopy. The A&E setting could facilitate early allergic diagnosis, increase parental awareness, and potentially improve patient management.

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Buccal midazolam: is a test dose in hospital needed?

Midazolam has been given via the buccal route for the acute management of prolonged seizures for some years. Buccal administration is preferable to the rectal route for parents and carers.¹ There is evidence that midazolam given in this way is more effective in curtailing seizures than diazepam and that there is no difference in the incidence of side effects.²

In some districts, including our own, if the family and the prescribing clinician want to use buccal midazolam the child is admitted as a day case to an acute paediatric ward for a "test dose". This has a number of disadvantages, particularly for children with autism or complex neurodisability:

- Inconvenience for families making the trip to hospital
- An extra day off school
- Staying the day in an unfamiliar environment
- The test dose is given to a conscious child and therefore does not mimic its use during a seizure; some consider this unethical
- Use of hard pressed acute care paediatric beds, nursing care, and medical time.

NICE guidelines³ mention buccal midazolam but do not suggest a test dose. A search of

Medline, The Cochrane Library, the BNF/Children's BNF, Epilepsy Action website, and The National Society for Epilepsy website found no mention of or reference to a need for a "test dose". The Joint Epilepsy Council of the UK and Ireland has recently published *A guideline on training standards for the administration of buccal midazolam*.⁴ This document "recommends that a test dose of midazolam be administered in hospital. Although this is at the discretion of the prescribing medical practitioner, we would endorse for patients with a medical history of respiratory problems or a previous adverse reaction to benzodiazepines". No references or other evidence are provided to support this recommendation.

Some paediatric neurologists recommend a test dose, others do not. A survey of paediatric neurologists in 2003 revealed that 49% disagreed or strongly disagreed with giving a test dose of midazolam, 34% were neutral, and 17% agreed with giving a test dose. Of those prescribing buccal midazolam, only 33% used a test dose in hospital.³

We have recently undertaken a survey of paediatricians selected from the RCPCH handbook. Fifty five questionnaires were sent to districts with representation in all British regions. Twenty six responses were received (47% response rate). Four of 26 (15%) did not use buccal midazolam. Four of 22 (18%) routinely used a test dose in hospital for "safety reasons", "to teach carers", "to provide reassurance to parents", and "because local paediatric neurologists recommended it". Eighteen of 22 (82%) did not use a test dose; reasons given were that "midazolam is as safe as diazepam", "it is unethical to give a test dose in circumstances which do not replicate its use in clinical practice", "local paediatric neurologists do not recommend a test dose", "a test dose is not recommended in the Children's BNF", and that "there is no evidence base for a test dose". Two of 22 use midazolam intravenous solution, 18/22 use Epistatus oral solution, and 2/22 use both preparations.

There are persuasive reasons to use buccal midazolam but few to recommend a test dose. Most paediatric neurologists and paediatricians do not recommend a test dose. Is it time for those of us continuing this practice to stop?

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NICE guidelines for hyperlipidaemia in children and young people with type 1 diabetes: time for a rethink?

Both diabetes mellitus and hyperlipidaemia are recognised risk factors for atherosclerosis. Postmortem studies show that aortic and coronary atherosclerosis is commonly seen before age 20 years. Hyperlipidaemia is correlated with the extent of early atherosclerotic lesions in adolescents and young adults.^{1,2} Despite this, the current NICE guidelines recommend that screening for children with type 1 diabetes is not indicated.³ The arguments put forward are that screening in adulthood may be just as effective and that further dietary intervention in young people with diabetes would be unwelcome. The American Diabetic Association, however, recommends the screening of all pubertal children (>12 years) at diagnosis; for pre-pubertal children, they recommend screening only if family history is of concern.⁴

Since 2000, our local policy was that all patients would be screened for hyperlipidaemia annually (non-fasting samples). Abnormal results (total cholesterol >5 mmol/l or triglycerides >2.4 mmol/l) are repeated with fasting samples. Persistent hyperlipidaemia is managed conservatively by improving glycaemic control, physical exercise, and advising on dietary changes. Pharmacological management of hyperlipidaemia is reserved for severe forms. We retrospectively analysed data for all patients with type 1 diabetes attending our clinics between January 2000 and March 2005.

There were 147 patients (75 male). Mean age was 11.2 years (range 2.0-19.1). According to protocol, there were 492 screening opportunities but only 421 screens were performed (83.5% compliance with protocol).

Twenty two patients (14.9%) had persistent hyperlipidaemia. Table 1 shows their diagnoses. Two patients required pharmacological treatment; the rest were managed conservatively. Twenty one patients with hyperlipidaemia were also poorly controlled diabetics with HbA1c >8%.

Routine screening for evidence of dyslipidaemia led to the diagnosis of clinically important conditions, in our cohort, for which further management was possible. Selective screening, as suggested by the ADA, would not have led to any significant delay in the management of these patients and may be an acceptable compromise.

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BOOK REVIEWS

Child and adolescent neurology, 2nd edition

Edited by Ronald B David. London: Blackwell, 2005, €79.50 (US\$140 (approx.)); €115 (approx.), hardback, pp 638. ISBN 1405117672

Current management in child neurology, 3rd edition

Edited by Bernard L Maria. Ontario: B C Decker, 2005, \$169.95 (£95 (approx.)); €140 (approx.), hardback, pp 687. ISBN 1550092928

Perhaps 15-20% of hospitalised children have a neurological problem. There are not enough paediatric neurologists to see them all in the UK or in many other countries including the USA and Canada. So we generalists need to recognise common neurological conditions, keep up with modern treatments of simpler problems, and know when to refer the more complex. These two substantial volumes (2.0 and 2.3 kg, respectively) aim to provide "essential knowledge and collected wisdom" and to "provide

Table 1 Diagnoses of patients

Diagnosis	No. of patients
Dysbetalipoproteinaemia (type III hyperlipidaemia)	2
Familial hypercholesterolaemia	1
Membranous glomerulonephritis	1
Multifactorial hyperlipidaemia	16
Diagnosis unknown (transferred prior to full evaluation)	1