the human Mantoux.³ If skin testing is equivocal, or in cases of infection involving potentially vulnerable sites (such as the mastoid), when adjuvant antimycobacterial drug treatment is given, then it may be helpful to have the surgical specimen examined by the polymerase chain reaction.⁴ This allows differentiation between *M. tuberculosis* and NTM infection, although the specificity and sensitivity of the polymerase chain reaction in this setting is not known. Thus appropriate antimycobacterial treatment can usually be given long before mycobacterial culture results are available at 2–3 months, and the choice of treatment does not rely solely on clinical features.

DAVID BURGNER
ALYSON KAKAKIOS
Departments of Microbiology and
Immunology/Infectious Diseases,
Royal Alexandra Hospital for Children,
Camperdown, NSW 2050,
Australia

- 1 Clark JE, Magee JG, Cant AJ. Non-tuberculous mycobacterial lymphadenopathy. *Arch Dis Child* 1995; 72: 165–6.
- 2 Del Beccaro MA, Mendelman PM, Nolan C. Diagnostic usefulness of mycobacterial skin test antigens in childhood lymphadenitis. *Pediatr Infect Dis J* 1989; 8: 206–10.
- 3 Huebner RE, Schein MF, Cauthen GM, Geiter GM, O'Brien RJ. Usefulness of skin testing with mycobacterial antigens in children with cervical lymphadenopathy. *Pediatr Infect Dis J* 1992; 11: 450–6.
- 4 Cook SM, Bartos RE, Pierson CL, Frank TS. Detection and characterization of atypical mycobacteria by the polymerase reaction. *Diagnostic Molecular Pathology* 1994; 3: 53–8.

Overnight oscillations of rectal temperature

EDITOR,—We have previously reported from New Zealand regular variations of overnight rectal temperature in infants.¹ The periodicity is about one hour and the amplitude up to 0.3°C. These infant rectal temperature oscillations were found in 24 (80%) of 30 continuous overnight recordings. We have now examined a further 98 overnight recordings of rectal temperature that were part of a study by Wailoo *et al* from Leicester.^{2,3} These recordings were classified by the infant's state of health^{2,3}: 'well' (n=24), 'incubating illness' (n=44), or 'unwell' (n=30). Regular oscillations were observed visually in 68 (69%) of 98 overnight recordings, similar to the 80% reported from New Zealand. Using power spectral density and digital filtering techniques, confirmation, and measurement, of regular oscillations were found to be present in 55 of these 68 recordings. Temperature oscillations were seen equally in all three health groups of the infants. Also there was no change seen in the proportion of infants with oscillations with increasing age.

The mean period of oscillations in the Leicester babies was 59.2 minutes (range 46.5–73.2); this compares well with the 58 minutes as discovered by Brown *et al*.¹ Well infant records had oscillations with a slightly longer period (mean 63.4 minutes) than unwell infant records (mean 57.2 minutes) ($p<0.05$) with those incubating illness in between (mean 58.6). The oscillatory period was significantly shorter for infants over 12 weeks (mean 57.1 minutes) than for infants under 6 weeks (mean 62.5 minutes), with infants 6–12 weeks falling in between (mean 59.2).

We have shown that the presence of overnight temperature oscillations is a consis-

tent characteristic of early infancy, occurring both in health and illness.

SHANE D GRIGGS
Department of Electrical and Electronic Engineering,
University of Canterbury,
Christchurch,
New Zealand

DAVID M TAPPIN
RODNEY P K FORD
Community Paediatric Unit,
Health Link South,
PO Box 1475,
Christchurch,
New Zealand

MICHAEL P WAILOO
Department of Child Health,
University of Leicester

- 1 Brown PJ, Dove RA, Tuffnell CS, Ford RPK. Oscillations of body temperature at night. *Arch Dis Child* 1992; 67: 1255–8.
- 2 Wailoo MP, Petersen SA, Whittaker H, Goodenough P. Sleeping body temperatures in 3–4 month old infants. *Arch Dis Child* 1989; 64: 596–9.
- 3 Lodmore M, Petersen SA, Wailoo MP. Development of night time temperature rhythms over the first six months of life. *Arch Dis Child* 1991; 66: 521–4.

Compliance with growth hormone treatment – are they getting it?

EDITOR,—We previously reported that only 48.9% of our patients treated with recombinant human growth hormone (rhGH) complied in all aspects.¹ We identified patient education and rhGH reconstitution as the major contributory factors and, as a consequence, offer patients a choice of rhGH preparation appropriate to their needs and a hospital based clinical nurse specialist to train them in its use at home. We have now administered the same questionnaire to a new group of patients.

Patients attending over a two month period were asked to complete a questionnaire if they were receiving rhGH. The questionnaire designed to assess level of understanding and compliance with treatment was accepted by 177 patients. Altogether 105 (59%) (group 1) had started treatment before the change in policy; 64 (36%) (group 2) had been trained by a clinical nurse specialist at home. Eighty one per cent of patients in group 2 had a good, 10% an adequate, and 9% a poor understanding of the therapeutic regimen compared with 50%, 34%, 15% respectively before ($p<0.01$). Patients in group 1, who had started rhGH before the change in policy failed to improve their understanding of the therapeutic regimen despite being seen at regular intervals at hospital visits by a clinical nurse specialist.

Compliance was assessed by questions designed to uncover the number of missed injections during a three month period. Fifty eight per cent of patients in group 1 complied with all aspects of their treatment, which was not significantly different from our previous experience; 84% of patients in group 2 complied with all aspects of their treatment ($p<0.001$).

Compliance in children prescribed rhGH treatment has improved considerably. Initial training of the patient and family at home appears to be the most important element in achieving compliance.

S L SMITH
P C HINDMARSH
C G D BROOK
Cobbold Laboratories,
Paediatric Endocrinology,
The Middlesex Hospital,
Mortimer Street,
London W1N 8AA

- 1 Smith SL, Hindmarsh PC, Brook CGD. Compliance with growth hormone treatment – are they getting it? *Arch Dis Child* 1993; 68: 91–3.

Morbidity from excessive intake of high energy fluids: the 'squash drinking syndrome'

EDITOR,—Following the article by Hourihane and Rolles on the 'squash drinking syndrome'¹ we would like to take the opportunity to remind readers that excessive squash drinking can rarely be associated with more serious side effects than failure to thrive.² Recently a 22 month old girl presented here with a generalised afebrile convulsion and hyponatraemia. She had previously been recognised elsewhere as failing to thrive, with her weight lying below the third centile. Her weight at presentation here was 8.7 kg. On questioning she was found to be drinking approximately two litres of squash a day, and at night slept with a large jug of juice at the bedside.

Investigation revealed a serum sodium concentration of 114 mmol/l, potassium 4.0 mmol/l, urea 2.9 mmol/l, creatinine 54 μ mol/l, glucose 5.2 mmol/l, and calcium 2.34 mmol/l with a simultaneous urinary sodium of 19 mmol/l and urinary osmolality of 128 mmol/kg. Serum sodium rose to normal concentrations simply with fluid restriction to normal fluid requirements of around one litre a day. A water deprivation test subsequently revealed normal renal concentrating ability excluding diabetes insipidus as a cause for her polydipsia. The parents were advised to restrict squash consumption.

There have been no further fits on follow up over one year. Squash consumption has varied, but a normal serum sodium has been maintained. However, weight gain has been better at those times when squash consumption has been less excessive.

We agree with Hourihane and Rolles that excessive squash consumption is an important cause of failure to thrive. Additionally the possibility of water intoxication, with all its complications, should be considered if squash consumption is excessive.

S A HOPE
K D FOOTE
Paediatric Department,
Royal Hampshire County Hospital,
Romsey Road,
Winchester,
Hampshire SO22 5DG

- 1 Hourihane JO'B, Rolles CJ. Morbidity from excessive intake of high energy fluids: the 'squash drinking syndrome'. *Arch Dis Child* 1995; 72: 141–3.
- 2 Corneli HM, Gormley CJ, Baker RC. Hyponatremia and seizures presenting in the first two years of life. *Pediatr Emerg Care* 1985; 1: 190–3.

The art of communication with children

EDITOR,—The need to communicate well with children and their parents is fundamental to paediatric practice. Most of us see our own children, or are exposed to sick children as their doctor, but rarely do we get an opportunity to join them as normal adults with whom they can play and frankly discuss their problems. One way I learnt to understand children better was to spend some weekends camping with the Woodcraft Folk, a recognised educational charity for children and young people. These camps are organised as

educational and activity projects to improve cooperation and help children to understand and respect others.¹ This encourages children to feel involved, and grow as responsible adults.

As a volunteer I got the opportunity to attend some weekend camps. Here I had to improvise games, make toys, and join the children in play to kindle their enthusiasm, before they could accept me as their peer. Once accepted, they discussed their personal problems and worries.

In one of the camps, I noticed a girl aged 12, who was withdrawn, and not actively participating in games. When she got to know me better, she confessed that 'her walk was funny', and so wanted to avoid any one noticing it. I could not see any abnormal gait, but understood that she had developed a complex. Her father had always mocked her walking. After a long discussion, and involving her friends, we restored her confidence. Similarly children who had concealed their asthma medication, coughed all night. Once I got to know about this, I helped them to understand their illness, and they took their medication regularly. These informal discussions with children helped me to understand their problems, and improved my communication with them.

I feel that every doctor or a nurse who is working with children should seek similar opportunities, and attend camps to educate themselves, and learn the art of communicating and understanding their young clients better. Encouraging this type of activity helps children learn to cooperate with others, and live in harmony as well behaved youngsters. This may help us to keep youngsters off the streets, and also decrease their antisocial activities in the community.

K M SRIVATSA
Department of Paediatrics,
Stoke Mandeville Hospital,
Aylesbury, Bucks HP21 8AL

1 The Woodcraft Folk. *Annual report*. London: The Woodcraft Folk, 1995.

Cardiac effects of growth hormone in short normal children

EDITOR,—In our recent article the formula for body surface area was stated incorrectly.¹ It should read body surface area = $\text{weight}^{0.425} \times \text{height}^{0.725} \times 0.007184$ (height in cm, weight in kg).² The relative merits of formulas versus nomograms have been previously underlined.³ Such formulas are rarely seen in print and it is therefore important for safe practice for them to be correctly documented. The calculations, however, were all based on the correct formula.

PIERS E F DAUBENEY
PETER R BETTS
STEVEN A WEBBER
Wessex Cardiothoracic Centre and Department of
Paediatrics,
Southampton General Hospital,
Southampton SO16 6YD

1 Daubenev PEF, McCaughey EM, Chase C, Slavik Z, Betts P, Webber SA. Cardiac effects of growth hormone in short normal children: results after 4 years of treatment. *Arch Dis Child* 1995; 72: 337-9.

2 DuBois D, DuBois EF. Clinical calorimetry: X. A formula to estimate the approximate surface area if height and weight be known. *Arch Intern Med* 1916; 17: 863-71.

3 Briars GL, Bailey BJR. Surface area estimation: pocket calculator v nomogram. *Arch Dis Child* 1994; 70: 246-7.

BOOK REVIEWS

Surgical Emergencies in Children. A Practical Guide. Edited by P A M Raine and A A F Azmy. (Pp 355; £65 hardback.) Butterworth Heinemann, 1994. ISBN 0-7506-1389-0.

This new publication covers a range of surgical emergencies affecting children and gives some background to the surgical conditions and concentrates on first line management and investigation. It tackles subjects by clinical presentation rather than pathology and is aimed at the non-paediatric surgical specialty trainee, casualty, and nursing staff. It covers a wide range of presenting symptoms, though by nature of the book, many rather superficially.

This topic has been poorly covered by recent texts, the majority of which have been major in-depth texts, unsuitable for quick reference by non-specialist staff. It is well laid out with short paragraphs, an easily readable concise style, bullet lists, and subtitles.

It is a shame that in the first chapter on emergency surgical admission, there is no stress on basic resuscitation, neither do APLS (ATLS) techniques appear here nor as a preface to a general trauma section. The illustrations are well chosen and helpful, though a few more examples of practical procedures would be useful, such as suprapubic aspiration and reduction of hernia. It would also be useful to have covered the role of the regional and supraregional specialist unit and transfer of the sick child, in particular neonates. The authors have set out to cover a large subject in an easily accessible format. The cost of this to some extent has been to lose any impression of the multiple controversies that exist within paediatric surgery. In picking a simple treatment plan, there are management suggestions that would not be acceptable in other centres in the UK, for example, that it is ever preferable to perform a pyloromyotomy under local anaesthesia or that it should ever, with careful management of the underlying electrolyte including potassium deficiency, be impossible to correct the electrolyte imbalance.

In general I feel the book is well written, well presented, with good illustrations. It will form a much needed up-to-date source of reference for medical students, nursing staff, and junior hospital doctors in the non-specialist environment.

ROWENA HITCHCOCK
Senior registrar in paediatric urology

Photosensitive Epilepsy. By Graham F A Harding and Peter M Jeavons. (Pp 182; £27.95 hardback.) Cambridge University Press, 1995. ISBN 1-898-68302-6.

As a newly appointed consultant, I was perplexed and challenged by Scott, a severely handicapped little boy who would be brought into the consulting room and promptly have a seizure on staring at the tartan squares on the carpet. If his mother could distract him from the carpet, his gaze would seek the linear patterns in the curtains, or worst still my

striped blouse, and further absence attacks would occur. Neither the books nor my more erudite colleagues could help much but his mother was convinced that he was sensitive to patterns.

The new edition of *Photosensitive Epilepsy* sheds much light on the phenomenon of pattern sensitivity and tells us far more besides about photosensitive epilepsy. The text is based on the authors' study of the largest cohort of photosensitive patients ever achieved (now over a 30 year period) and details new diagnostic techniques, prognosis, and genetic implications of the condition.

The authors strongly argue that attention to correct EEG technique is essential to demonstrate photosensitivity reliably. A photoconvulsive response is often familial, is twice as common in females, and presents typically around puberty (although the history often suggests it may have been present for some years before it is recognised). Long term follow up studies indicate that a quarter of patients lose their photosensitivity with age.

In western Europe the commonest precipitant of photosensitive epilepsy is television viewing (due to AC mains supply which alternates at 50 Hz). In 1993, 'videogame' epilepsy was given much footage in the European press as increasing numbers of seizures were reported in children who watched videos. Most video monitors are 70 Hz (and thus likely to be outside the photosensitivity range) and many children seized as a result of playing with hand held modules or in game arcades. Thus, there was an additional factor other than simple photosensitivity. The authors were in the vanguard of opinion that this was likely to be pattern sensitivity and they discuss their evidence for this.

The fascinating subject of self induced photosensitive epilepsy is considered in which children have a compulsive attraction for TV (sometimes being drawn across a road to watch TV in shop windows). If they can get close enough to the set, they will have a seizure. Self induced pattern epilepsy is much rarer and is usually found in children with learning disability.

There is a chapter on treatment and, although avoidance of stimuli is still recommended, there has been a change of view regarding drug treatment. It is now recommended that all young people with primary photosensitive epilepsy are treated with sodium valproate because of the increasing exposure to provocative visual stimuli in modern day life. The book contains a large number of useful and fascinating facts, including pattern testing techniques and the stringent testing techniques applied to pilots, divers, and train drivers.

I would consider the book essential reading for all doctors who treat patients with epilepsy.

GAYNOR F COLE
Consultant paediatric neurologist

Recent Advances in Paediatrics - 13. Edited by T J David. (Pp 233; £26.50 paperback.) Churchill Livingstone, 1994. ISBN 0-443-05100-3.

'When I was a boy: World a better spot
What was so was so: What was not was not'

There are different approaches to the problem of keeping up to date. The least effective is that of the ostrich, stick your head in the sand