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 consistent 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 Lodemore 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 μmol/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