LETTERS TO THE EDITOR

Response to venepuncture for monitoring in primary schools

EDITOR,—We welcome the commentaries that followed our paper that was published in May.[1] We think, however, that we need to clarify some of the points made in these commentaries to represent the views of the team members.

The last sentence of our paper can be easily misinterpreted as conveying the idea that venepuncture is ethically acceptable if the scientific merit of the question is important and the methodology of the study is sound. We hope that the readers will be convinced after reading our paper that, in the conduct of the study, we were satisfied that information was available to the children's parents in the study, that discomfort and the potential risks to the participants were minimal or negligible, and that parents and children were free to decide whether they wanted to participate in the study and free to withdraw from the study at any time, even after signing a consent form. The scientific merit of the research is an important criterion to consider in addition to honest information, minimal distress to participants, and freedom to withdraw from the study at any time.

Professor Cockburn's commentary may be interpreted as if we were challenging the Department of Health's circular on local research ethics committees (1991)[2] and the MRC document on the ethical conduct of research in children (1991).[3] Neither document was available when we planned the pilot study and came to our attention after the pilot study was carried out in May 1992. In my judgment we did not contravene the MRC document because they explicitly include 'to obtain blood specimens' as an example of activity associated with negligible risk. It is worth commenting that for a long time we were reluctant to include venepuncture as part of our nutritional monitoring system. However, as the Department of Health was keen to harmonise, as far as possible, the information obtained from the range of health surveys they are funding, we carried out the pilot study. The main reason for conducting the pilot study was to convince ourselves that the inclusion of blood sampling in our main study would be acceptable to parents, children, and teachers.

We were very critical of the decision of the BPA to classify venepuncture as a low risk procedure.[4] We were relieved by Professor Hull's clarification that in experienced hands, venepuncture is a minimal risk procedure. One of our three phlebotomists had a very high rate of technical failures. We have learnt the lesson. For our main study we have made clear to the venesectors that they will have to spend some time training and the amount of training will be determined by the senior chief medical laboratory scientific officer of the department of haematology with whom we are collaborating.

Armed with the results of the pilot study we submitted a protocol to include venepuncture in our main study to ethics committees in England and Scotland. We were relieved to find that 25 out of the 26 ethics committees approved our request; one is still processing our application. Incidentally, only one of the ethics committees queried the gift of a T-shirt as a show of appreciation to the children and most of the headteachers collaborating with our study were supportive of this element of the study.

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1 Hammond J, Chinn S, Richardson H, Rona R. Response to venepuncture for monitoring in primary schools. *Arch Dis Child* 1994; **70**: 367–72.
2 Department of Health. *Circular on local research ethics committees.* London: DoH, 1991.
3 Medical Research Council. Working party on research in children. *The ethical conduct of research on children.* London: MRC, 1991. (MRC Ethics Series.)
4 British Paediatric Association. *Guidelines for the ethical conduct of medical research involving children.* London: BPA, 1992.

Octreotide treatment associated with adrenal suppression and poor feeding

EDITOR,—Octreotide, a long acting somatostatin analogue, is increasingly used to stabilise infants with hyperinsulinaemia before surgery, or even in long term control of hyperinsulinism.[1] It has few reported side effects in this group of patients. I write to report probable association of the use of octreotide with potentially severe adrenal suppression and with the less dangerous, but important problem of refusal of oral feeds.

Case report

A boy was born of consanguineous parents at 35 weeks' gestation weighing 1590 g. Hypoglycaemia was noted on the first day of life with increasing glucose utilisation to >12 mg/kg/minute. Investigations on day 8 revealed low free fatty acid and branch chain amino acid, normal growth hormone, and high insulin concentrations at the time of the hypoglycaemia. A diagnosis of hyperinsulinism was made and nesidioblastosis (pancreatic endocrine dysregulation syndrome), was confirmed on day 90 at 95% pancreatectomy resulting in subsequent normoglycaemia at six months' follow up.

Plasma cortisol was 56 nmol/l at the time of hypoglycaemia on day 8. The inadequate response was thought to be due to the immaturity of the infant. The long acting somatostatin analogue, octreotide, was commenced on day 10, 4·5 μg/kg/day along with physiological replacement doses of hydrocortisone. The predose 9 am plasma cortisol concentrations remained constantly low (56, 21, 56, 42, 14 nmol/l) until the time of surgery and cessation of octreotide and then rose to 489 nmol/l within 48 hours and remained normal subsequently.

The baby fed extremely poorly requiring nasogastric feeds till day 60 when a trial of diazoxide was commenced and the octreotide withdrawn. The baby fed well for eight days until diazoxide related heart failure supervened and octreotide was restarted at which point nasogastric feeds were once again required. Octreotide was withdrawn postoperatively and immediately the child again took oral feeds.

The feeding difficulties and suppressed plasma cortisol concentrations in this child seem related to octreotide treatment. Somatostatin suppresses many peptide hormones and has a well established use in nesidioblastosis, sometimes for long periods with few reported side effects.[1] Its use has been explored in pituitary Cushing's syndrome with varying success.[2 3] Suppression of appetite has been reported to the Committee on Safety of Medicines in one previous adult case but there have been no previous reports of hypocortisolaemia.

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1 Glaser B, Hirsch HJ, Landau H. Persistent hyperinsulinaemic hypoglycaemia of infancy: long term octreotide treatment without pancreatectomy. *J Pediatr* 1993; **123**: 644–50.
2 Ambrosi B, Bochicchio D, Fadin C, Colombo P, Faglio G. Failure of somatostatin and octreotide to acutely affect the hypothalamic-pituitary-adrenal function in patients with corticotrophin hypersecretion. *J Endocrinol Invest* 1990; **13**: 257–61.
3 Invitti C, de Martin M, Brunani A, Piolini M, Cavagnini F. Treatment of Cushing's syndrome with the long acting somatostatin analogue SMS 201-995 (sandostatin). *Clinical Endocrinol (Oxf)* 1990; **32**: 275–81.

Aetiology of childhood leukaemia

EDITOR,—The review by Taylor on immunogenetics and the aetiology of childhood leukaemia,[1] refers to the possible role of environmental factors, including infection, on the incidence of this disease. The observation that the mortality rate due to leukaemia rose by 4·5% annually in Great Britain between 1911 and 1959 is cited.[2] Interestingly, 1911 is the year in which the threat of tuberculous cattle to human health was firmly established by the British Royal Commission on Tuberculosis. This led to an increased use of preventive measures, initially pasteurisation of milk and subsequently eradication of infected cattle. Before that time, infection of young children by the bovine tubercle bacillus (*Mycobacterium bovis*) was a common event but most infections resolved spontaneously and appeared to afford protection against pulmonary tuberculosis of human origin later in life. Accordingly BCG vaccine, produced from *M bovis* and originally given orally to neonates, was intended to mimic this natural milk borne infection.

Some authors have claimed that BCG vaccination leads to a reduction in the incidence of leukaemias and other childhood cancers though others refute these claims. A re-evaluation of these reports revealed that BCG showed a significant protective effect only when it was given neonatally and in regions where protection against tuberculosis was also demonstrable.[3] One explanation of this claimed effect is that BCG vaccination enhances the ability of cell mediated immune reactions to remove embryonic remnants from which cancers might otherwise arise.[4]

It is therefore possible that natural infection by *M bovis* or its artificial analogue, BCG vaccination, in infancy might afford protection against leukaemia. This hypothesis could be tested in regions or countries that are undergoing changes in BCG vaccination policies.

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1 Taylor GM. Immunogenetics and the aetiology of childhood leukaemia. *Arch Dis Child* 1994; **70:** 77–81.
2 Court Brown WM, Doll R. Leukaemia in childhood and young adult life. Trends in mortality in relation to aetiology. *BMJ* 1961; i: 981–8.
3 Grange JM, Stanford JL. BCG vaccination and cancer. *Tubercle* 1990; **71:** 61–4.
4 Rosenthal SR. Cancer control by stimulation of the immune system. *Bulletin of the Institute Pasteur* 1983; **81:** 55–83.

Dr Taylor comments:

I am most grateful to Drs Grange and Stanford for drawing my attention to the apparent association between reduced natural infection with *M bovis* in milk and the increased incidence of childhood leukaemia. The UK Childhood Cancer Study (UKCCS) is currently collecting information about episodes of infection and histories of immunisation in children with leukaemia and in matched controls. It should be possible to obtain preliminary indications from these data about any protective effect of BCG vaccination. The idea that therapeutic immunostimulation using BCG could be used to treat childhood leukaemia is not new. However, the results of the MRC's Concord trial in childhood acute lymphoblastic leukaemia[1] and more recent studies failed to indicate any significant benefit of BCG immunotherapy. In adult myeloid leukaemia combined BCG/allogeneic immunotherapy stimulated strong cell mediated immunity to donor, but not to autologous leukaemia cells,[2] and produced little long term benefit. The use and expense of prophylactic BCG vaccination as an immunological protective measure in childhood leukaemia would only be justified if it markedly reduced the incidence of the disease. Positive preliminary evidence from the UKCCS might justify a detailed case-control study of this question in the UK. However, bearing in mind Greaves' hypothesis that childhood leukaemia could arise from inappropriate immunostimulation,[3] there is much to commend a cautious and considered approach to the use of prophylactic BCG vaccination as a preventative measure in childhood leukaemia.

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2 Taylor GM, Zuhrie SR, Harris R. Cell-mediated cytotoxicity in relation to active immunotherapy in acute myeloid leukaemia. *Cancer Immunol Immunother* 1979; **5:** 263–74.
3 Greaves MF, Alexander FE. An infectious etiology for common acute lymphoblastic leukemia in childhood? *Leukemia* 1993; **7:** 349–60.

Cough – but is it asthma?

EDITOR,—Dr Sheila McKenzie has suggested that cough without wheeze should not be classified as asthma unless there is evidence of airway lability.[1] In practice, chronic persistent cough is most troublesome in preschool children who cannot reliably perform standard tests of lung function.

A study of 60 children under 6 years with chronic cough showed that 63% produced at least one positive reaction to skin testing with inhaled allergies (57% for house dust mite) compared with 75% of children with classical asthma and 10% of children without respiratory problems.[2] Chronic cough, like wheeze, was usually worse at night (75%), precipitated by exercise (85%), and associated with nasal discharge (70%) or sore throat (32%).

Two years after presentation 83% of children reported improvement or no cough at all but 25% developed recurrent wheeze as well as cough. It was difficult to assess response of cough to treatment because of the tendency to spontaneous resolution.

Cough alone may just be a feature of the viral upper respiratory infection which can also induce wheeze in asthmatic children or it may be a manifestation of airway inflammation triggered by hypersensitivity to inhaled allergens such as house dust mite. Although most children with chronic cough do not have asthma, there is no reliable way of identifying those who eventually develop definite bronchospasm. For persistent cough a trial of inhaled β agonists or inhaled steroids is logical and potentially less harmful than other common remedies such as antihistamines, antibiotics, or even surgical ear, nose, and throat procedures.

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1 McKenzie S. Cough – but is it asthma? *Arch Dis Child* 1994; **70:** 1–2.
2 Lewis HM, Haeney M, Jeacock J, Thomas H. Chronic cough in a hospital population; its relationship to atopy and defects in host defence. *Arch Dis Child* 1989; **64:** 1593–8.

Growth standards for infancy

EDITOR,—We fully endorse the views of Wright *et al* on the need to develop new growth standards for infancy.[1] The comparison of their Newcastle data with widely used standards[2] and with the Cambridge Infant Growth Study[3] illustrates this need succinctly. The Cambridge study is not, however, confined to breast fed infants. Although a high proportion (90%) were *initially* breast fed,[3] this declined to 65% by 12 weeks, 54% by 24 weeks, and 18% by 1 year. Throughout most of the first year, the weights of infants breast fed to at least 24 weeks were similar to those bottle fed from 3 weeks. Both groups showed an increased weight gain compared with standards in the first six months, followed by a more marked relative decline, with only the breast fed boys showing a slightly slower growth after nine months compared with those bottle fed. At 1 year, the mean (SD) weights were: boys breast fed (n=54) 9·79 (0·93) kg, bottle fed (n=35) 9·93 (0·97) kg, girls breast fed (n=59) 9·17 (0·85) kg, bottle fed (n=24) 9·18 (0·80) kg, and the Z scores[2] were −0·4, −0·2, −0·5, and −0·6 respectively. Weaning practices are at least as important as mode of milk feeding. Energy intakes during and after weaning are lower now compared to the 1950s when the standards were prepared.[4] In view of the differences in feeding practices and social circumstances, it is encouraging to find that the growth of Cambridge infants showed such similarities to the Newcastle data.

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1 Wright CM, Waterston A, Aynsley-Green A. Comparison of the use of Tanner and Whitehouse, NCHS, and Cambridge standards in infancy. *Arch Dis Child* 1993; **69:** 420–2.
2 Tanner JM, Whitehouse RH, Takaishi M. Standards from birth to maturity for height, weight, height velocity and weight velocity: British children, 1965. Part I. *Arch Dis Child* 1966; **41:** 454–71.
3 Whitehead RG, Paul AA, Cole TJ. Diet and the growth of healthy infants. *Journal of Human Nutrition and Dietetics* 1989; **2:** 73–84.
4 Paul AA, Whitehead RG, Black AE. Energy intakes and growth from two months to three years in initially breast-fed children. *Journal of Human Nutrition and Dietetics* 1990; **3:** 79–92.

BOOK REVIEWS

Psychological Treatment in Disease and Illness. Edited by Matthew Hodes and Stirling Moorey. (Pp 230; £15 paperback.) Gaskell and the Society for Psychosomatic Research, 1993. ISBN 0-902241-57-5.

Any book which, in the opening few sentences, can give a name check to Hippocrates, Descartes and Freud, is clearly not going to come last in the erudition stakes. Of more importance is whether it can perform equally well – or better – in the areas of elucidation and education.

Happily for the reader, the answer is a resounding yes. This book addresses, both clearly and highly informatively, major developments in the psychological treatments of psychosomatic and physical disorders.

The stimulus for this book was provided by a conference entitled 'Psychological Treatment in Human Disease and Illness' which was held in 1990. Expansion and updating of original talks enable the editors to proclaim the text as 'state of the art'. Of additional benefit is that the book is coherent and authentic as a whole and does not suffer the disconnectedness of some texts derived from conferences rather than *de novo*.

The book is divided into two sections. In the first, there is an overview of psychoanalytic, cognitive behavioural, and family psychotherapy approaches in dealing with psychosomatic and physical disorders. The second section looks at the application of psychotherapeutic approaches to particular conditions such as somatisation disorder, irritable bowel syndrome, chronic pain, brittle diabetes, and anorexia nervosa.

The major strengths of the book are its clear description of both theory and practice, and its ability to bring the two together harmoniously.

Theoretically, there are good outlines of the ideas behind the different therapeutic approaches. Particularly strong is Tom Sensky's description of cognitive therapy, succinctly covering the important aspects of the cognitive model (including dysfunctional beliefs, negative automatic thoughts, and cognitive distortions), and its therapeutic approaches. He makes the important point that especially in physical illness, not all false beliefs are dysfunctional and not all dysfunctional beliefs are false. For example, denying the seriousness of illness or even its presence can sometimes serve as a protective function and is therefore not necessarily dysfunctional. Conversely, the belief of 'not having long enough to live to achieve what I want' might be true but might also be dysfunctional if it results in the ill person focusing on nothing other than this belief and giving up trying to achieve anything. Dr Sensky stresses that the focus of therapeutic work in cognitive therapy is to focus on dysfunctional beliefs, *not* to