Glue ear and grommets

SIR,—The glue ear is such a common problem that your leading article (4 November, p 1247) is welcome. Although fluid in the middle ear must not be ignored, it is rather sweeping to state that surgery is generally required and should not be postponed if fluid has not resolved within four to six weeks. Provided that the hearing loss is not marked, that the changes in the drum are minimal, and that pain and episodes of otitis media are not occurring there is no haste for myringotomy or the insertion of grommets. Glue ears frequently settle spontaneously, with normal drums and hearing: this includes those in which fluid has been known to be present for over four to six weeks.

T R BULL

London W1

Grommets and swimming

SIR,—While I agree with Mr P E Roland (4 November, p 1301) that children frequently have little trouble when swimming with grommets in situ, they must be advised against such activity at least if not wearing a suitably fitting ear plug (in which case they should not dive). In the Royal Naval Hospital Haslar ENT unit the problem was investigated with a life-size soft plastic model of the pinna, external auditory meatus, tympanic membrane, and middle ear. Grommets (ventilation tubes) of various types, from the original Sheppard to the soft Silastic models, were introduced into the artificial tympanic membrane. In a controlled experiment solutions of saline soapy water (to reduce surface tension) and tap water were introduced into the artificial meatus at varying pressures simulating varying depth under water. It should be remembered that at a depth of 33 ft (10 m) under water the meatal pressure is twice that at the surface—that is, two atmospheres. When breath-holding under water nasopharyngeal pressure and, with a patent eustachian tube, the pressure in the middle ear cleft remain at one atmosphere.

We have found in these experiments that water passes very freely through the grommets into the middle ear cleft, even when the pressure in the external meatus is at that of the surface (one atmosphere). In such situations infection or the results of chemical irritation may easily affect the middle ear mucosa. Personal experience in the outpatient clinic has confirmed that the majority of cases of childhood otitis media occurring in the summer following grommet insertion are the direct result of swimming, a cause-and-effect relationship being historically impossible to refute.

P W HEAD

Royal Naval Hospital,
Haslar,
Gosport, Hants

Interpreting clinical trials

SIR,—There may be confusion arising from the juxtaposition of two points in your leading article on this subject (11 November, p 1318). Frieman *et al.*¹ in their survey of 71 "negative" trials, make their major point that the investigators did not pay enough (or any) attention to the relationship between the

number of patients investigated and the chance of reporting a *clinically* interesting result. This led to some of the trials studied having a very low probability of detecting quite large differences between treatment and control: that is, they were studies of low power or high type II error. It is also pointed out that if some of the investigators had entered more patients a positive result might have been forthcoming.

The point in the leading article that setting confidence limits around the estimate of a difference between two treatments gives more information than merely reporting "no difference at 5%" is well made. It does need to be pointed out that reporting confidence limits at the end of a study does not absolve investigators from examining the power of the statistical tests used at the start.

The key question, "Am I going to be able to recruit enough patients to detect a clinically interesting result?" must be asked right at the start. For the lone investigator with only one clinic or practice from which to recruit patients the problem is that the answer is quite likely to be "No."

In a straightforward comparison between two groups with success or failure as the only criterion the number of patients required for anything other than a once in a decade breakthrough rises rapidly into the hundreds. It is at this stage that the model investigator should send for the statistician. But that is another point.

IAN CLARKE

London W6

¹ Frieman, J A, *et al*, *New England Journal of Medicine*, 1978, **299**, 690.

Hospital laboratory computing

SIR,—Your leading article on hospital laboratory computing (18 February, p 387) has just come to my attention. It seems to imply that I am one of those who have given most attention to data acquisition. On the contrary, I have always believed, as you do, that processing is in fact most important.

It is doubly unfortunate, therefore, that I must disagree with your views on concurrent processing, complex operating software, easy inquiry facilities, and other notable achievements of the computer manufacturers. I have pointed out elsewhere that the clinical laboratory is essentially a batch operation: we receive test requests in batches, collect and process specimens in batches, deliver reports in batches. To force this system into the conventional real-time operating mould interferes with efficiency in laboratory utilisation.

An efficient laboratory system starts with a laboratory-dedicated minicomputer operated in batch mode; maintains a complete patient census, verified by laboratory personnel for laboratory purposes; provides an individualised computer-printed laboratory request form at regular intervals to each nursing unit, with all essential patient data already imprinted, to eliminate any transcription of requests by clinical or clerical personnel; returns a printed acknowledgment of test orders and specimens received to the nursing unit; documents each stage in the laboratory processing; cumulates results in logical order and inserts them in the patient's record; and delivers an individual report to each physician on a schedule appropriate to his respon-

sibilities, informing him of current results on his list of patients. This last item is the key service that can be supplied by a laboratory computer system. None of the commercial systems I have seen offer it.

Systems based on these principles have been operating in a few hospitals in the US at a cost one-third or less of the conventional system cost. Is there a hospital laboratory in Britain that is interested in trying it?

SAMUEL RAYMOND

Department of Pathology,
University of Pennsylvania,
Philadelphia

Physiotherapy in obstetrics and gynaecology

SIR,—In September 1978, the Obstetric Association of Chartered Physiotherapists changed its title and became the Association of Chartered Physiotherapists in Obstetrics and Gynaecology, thus enlarging its work to include gynaecology in its range of activities. Many members of this specialist group within the Chartered Society of Physiotherapy have been working in this field for several years, giving pre- and post-operative treatments in physiotherapy, caring for all types of patients with varying conditions, among them the elderly and the incontinent. It has been felt for some time that more can be done to help patients with genital prolapse and pelvic laxity problems by giving effective muscular re-education to relieve symptoms, delaying surgery and perhaps preventing it from becoming necessary.

The role of such specialists is continuing to grow. They have much to offer towards improving the quality of life of women from pregnancy throughout the rest of their lives. There are now 400 of these physiotherapists working in Britain, in private practice and within the NHS, many of whom would be only too pleased to contribute towards improved patient health care and a reduction in hospital waiting lists.

Any medical practitioner wishing for further information should contact me or the secretary of the association, Mrs M Ellis, MCSP, 12 Bainbridge Holme Close, Sunderland, Tyne and Wear, who will be pleased to provide more details.

F H E BARLOW

Chairman,
Association of Chartered
Physiotherapists in Obstetrics
and Gynaecology

Greystones,
Plawsworth,
Chester-le-Street, Co Durham

Intrauterine hiccup

SIR,—I would like to comment on a phenomenon which has recently caused anxiety to several pregnant mothers.

Each mother complained of regular jerking movements made by her fetus during the last 6-8 weeks of pregnancy. The movements consisted of regular chronic jerks occurring at a frequency of one per second and lasting from three to six minutes. The activity occurred at any time but was most frequently noted in the evening or at night. In each case no abnormality was found in the baby after delivery, nor was there any suggestion of convulsive activity. In the most recent case the mother, who was medically qualified, was

justifiably concerned that her baby was convulsing in utero. It was subsequently noticed that her baby was frequently affected by hiccups following a feed. The hiccups occurred at a rate of one per second and lasted for several minutes at a time; this phenomenon persisted to the age of three months.

It is known that the fetus drinks liquor in utero, and hiccups have been demonstrated by real-time ultrasound scanning.¹ Hiccupping in utero might explain the observations of these mothers and such an explanation by her doctor would help to allay genuine anxieties.

Real-time scanning would be valuable to confirm this diagnosis when the technique is available.

I SWANN

Department of Child Health,
Welsh National School of Medicine,
Llandough Hospital,
Penarth, S Glamorgan

¹ Roberts, A B, *Midwife, Health Visitor, and Community Nurse*, 1978, **14**, 256.

Infant-feeding practices among immigrants in Glasgow

SIR,—Rickets among Asian children in Glasgow has been recognised as a serious problem for 15-20 years¹ and in their recent paper Dr K M Goel and others (28 October, p 1181) restate their earlier finding that 12.5% of Asian children in their sample had the disease. Such a high prevalence would appear inconsistent with an absence of their findings, that a high proportion (87%) of their Asian children received vitamin preparations. It is not clear, however, whether the taking of vitamin preparations necessarily includes vitamin D and also whether it refers to an adequate course, sufficient to protect against the disease throughout childhood, or merely to vitamins having been taken at some time. The fact that many Asian children still present clinically with acute rickets at Glasgow hospitals provides corroborative evidence for a continuing high prevalence of the disease and suggests that overall vitamin supplementation is grossly inadequate.

It is all too easy to believe that because a problem has been recognised for a long time and is readily preventable and measures have been previously instituted it must have been solved. There should be no such deception or complacency in the case of rickets. Prevention in Asian children is a community problem which requires a renewed and sustained initiative from the health, educational, and social services professionals acting jointly with the parents and leaders of the Asian community.

RAFIK GARDEE

Greater Glasgow Health Board

DAVID GREAVES

Social Paediatric and Obstetric Research
Unit,
Glasgow

¹ Dunnigan, M G, *et al*, *Scottish Medical Journal*, 1962, **7**, 159.

Inadequacy of information on side effects

SIR,—The letter from Drs H C Drysdale and M D Hellier (7 October p 1021) highlights a problem which faces all who attempt to provide information about the adverse effects of drugs: what should be included?

The description of adverse effects in a drug's data sheet has to serve two purposes: it should indicate those effects which have been attributed to the drug and it should give the prescriber some idea of the potential toxicity of the drug. A comprehensive list of all reported adverse effects may not be the most useful way of indicating to the prescriber what he should anticipate when using the drug. Furthermore, the medical literature is full of reports of adverse drug reactions which are poorly documented and in which the causal relationship is far from established. It is important that these should not become part of the "toxicity profile" of the drug solely on the basis of such reports.

A possible way of dealing with the problem would be to classify the adverse effects of a drug into three groups. Group 1 would be those side effects which appear to be dose-related and occur fairly predictably in a proportion of patients treated; for many of these effects it is possible to give a rough guide to how often they occur from clinical trials data. Group 2 would contain reactions which are less common but well documented and reported frequently enough for a causal relationship to be accepted. Group 3 would contain reactions which, although reported in the medical literature, have not been adequately documented and for which a causal relationship remains to be established.

From Group 1 the prescriber could obtain a rough idea of what adverse effects to anticipate when using the drug. Groups 2 and 3 he could use to help him decide whether a reaction occurring in a particular patient was likely to be due to that drug. It would be especially important to document fully any reactions described under Group 3 and to make sure that they were reported not only to the Committee on Safety of Medicines but also to the drug company concerned.

LINDA BEELEY

University Department of Therapeutics and Clinical
Pharmacology,
Queen Elizabeth Hospital,
Birmingham

Disentangling Kaposi's sarcoma

SIR,—Your leading article (14 October, p 1044) refers to some of the problems that are peculiar to this tumour. You state that "the endemic occurrence of an unusual neoplasm in malarial areas parallels Burkitt's lymphoma," and it has been suggested that this association might be due to the known immunosuppressive effect of malaria which may play a role in the aetiology of Burkitt's lymphoma. The distribution and clinical features of Kaposi's sarcoma have recently been reviewed in a series of papers from Malawi,¹ Uganda,² Tanzania,³ and Zambia.⁴ There is no evidence to suggest that the tumour is related to the endemicity of malaria or to any other specific parasitic disease. For example, in Tanzania the regions of lowest incidence of Kaposi's sarcoma are among the regions of highest malaria transmission. Moreover, in Uganda Kaposi's sarcoma is often seen in the mountainous, malaria-free south-west, where Burkitt's lymphoma does not occur. Unfortunately there is as yet no adequate explanation for the very large local variations in incidence in east and central Africa and, in particular, for the very high rates in western Uganda and eastern Zaire.

The sex distribution of the tumour in Africa is also difficult to explain. In children under the age of 15 the male:female ratio in three of these reports was less than 2.5:1, but there was an increasing ratio over this age, reaching 8:1-14:1 at over 40 years. It is difficult to believe that this could be due to different exposure to an environmental influence in these rural areas, although the overall geographical distribution suggests an environmental agent. It seems more likely that endogenous, possibly hormonal, factors play an increasing role with age in determining susceptibility or resistance to the causative agents.

M S R HUTT

Geographical Pathology Unit,
Department of Morbid Anatomy,
St Thomas's Hospital Medical School,
London SE1

J M BLAND

Department of Community Medicine,
St George's Hospital,
London SW17

¹ O'Connell, K M, Borgstein, J, and Hutt, M S R, *East African Journal of Medical Research*, 1977, **4**, 59.

² Owor, R, and Hutt, M S R, *East African Journal of Medical Research*, 1977, **4**, 55.

³ Bland, J M, Mutoka, C, and Hutt, M S R, *East African Journal of Medical Research*, 1977, **4**, 47.

⁴ Naik, D G, *East African Journal of Medical Research*, 1977, **4**, 65.

Body weight and endocrine function in anorexia nervosa

SIR,—We were glad to read that the findings of Dr A Wakeling and his colleagues on endocrine function in anorexia nervosa (21 October, p 1164) are in agreement with our own (19 August, p 526) and look forward to seeing the published data. In our study the initial test was carried out as soon as possible after admission in most cases, as we wished to investigate the patients in the untreated state. Clearly the minor impairment in prolactin secretion which we demonstrated (20 August 1977, p 521) is readily reversible on refeeding, and Dr Wakeling's work appears to show that this requires as little as five days' dietary treatment. Our own observations on patients tested during the course of weight gain are in accordance with this.

With regard to the hypothesis of excessive central dopaminergic activity in anorexia nervosa, we have merely stated that this would be consistent with our findings of diminished prolactin and thyrotrophin (TSH) reserve, whereas the alternative hypothesis of dopamine depletion would be inconsistent. No implication as to the aetiology of the disease is intended. Even proved dopamine excess might well be secondary to starvation, as are so many of the other clinical, endocrine, and biochemical features of anorexia nervosa.

R D G LESLIE

A J ISAACS

JOAN GOMEZ

R I S BAYLISS

Westminster Hospital,
London SW1

Somalis with iron deficiency

SIR,—The paper by Professor M J Murray and others (21 October, p 1113) is an interesting contribution to the discussion of the interaction of iron deficiency and infection. Their findings should be noted by those who