

The body defence mechanisms and a given level of antibiotic should have a better chance of dealing with and destroying the bacteria in a small shower than in a large one before they can cause permanent structural damage. It therefore seems reasonable that an attempt should always be made to reduce the size and incidence of the bacteraemia caused by tooth extraction, and yet too often, as the extractions are easy ones and because of the present accent on conservation of teeth, they are given to the houseman to do as a good opportunity for him to gain practice in extractions. Dental clearances, even when properly indicated, cause the greatest general upset of any dental operation. They should be performed with the utmost care by skilled operators, actively trying to inflict the minimum of trauma, instead of by those with the least experience, as is often the case. Surely physicians in charge of these susceptible cardiac cases, besides considering so very carefully the antibiotic cover, should also insist upon their patients being operated upon by the most skilful person available.—I am, etc.,

FRANK COFFIN.

London W.1.

REFERENCE

- ¹ Coffin, F., and Thompson, R. E. M., *Lancet*, 1956, 2, 654.

Postgraduate Training in Obstetrics

SIR,—I was distressed and appalled to read the letter by Dr. M. J. Ball (September 28, p. 806).

The value of postgraduate work has long been recognized, and the answer to the problem of general practice care in obstetrics is surely not to cut it off entirely but to try and incorporate the services of the practitioner into the general hospital. This system works very well in Canada, and I see no reason why it should not do so in Britain. The solutions to the overcrowding of the hospital beds in maternity wards can, of course, only be rectified by building new hospitals with more facilities. However, I doubt that the patients themselves would wish to be excluded from the care of their general practitioner during their antenatal period, their confinement, and the post-natal period, to be looked after instead by some busy, hurried, junior houseman who has no knowledge of the patient's particular problems and will likely never see the patient, or her baby, again after delivery.

Then the solution lies in: (a) Paying the general practitioners more and thereby decreasing the work load on individual practitioners; (b) increasing the stimulus for general practitioners to attend postgraduate courses; (c) to incorporate general-practitioner services in obstetrics into the hospitals in Britain so that the general practitioner can admit a patient into hospital, be present at her delivery, and follow her in her post-natal course; and (d) to provide facilities for this service by making available more hospital beds.

Here in British Columbia we have long recognized the importance of the general practitioner in obstetrics. All general practitioners in this province have the right and the privilege of admitting patients to hospital. This includes patients who have been looked after in their prenatal course. Of women in British Columbia, 98% have their babies in hospital. Only 40% of these are delivered by certified specialists, yet the figures for maternal mortality and for foetal mortality bear a close resemblance to those that the World Health Organization finds acceptable. Any general practitioner in this province can find stimulus, excitement, and confidence from working in a hospital where certified specialists also look in on his patients: where he is kept up to the mark and has freely available to him all the services that a hospital can provide. If there are more doctors like Dr. Ball in Great Britain who recommend that the general practitioners take less and less part of the total care of their patients and exclude them from participating in yet one more service I fear that the National Health Service will slowly come to an end. Perhaps Dr. Ball and his associates can then spend their time in splendid isolation while the general practice, the bulwark of British medicine, will be practised on in Canada and the United States.—I am, etc.,

JAMES TURNBULL.

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Canada.**Cot Death in Twins**

SIR,—We have been interested for several years in this occurrence, and particularly when both of a pair have died at or about the same time. We have ourselves examined two dead pairs and through newspaper reports and the help of colleagues are aware of several other deaths having occurred in pairs.

To increase our knowledge of this event, we would be grateful if any doctor who learns of, or has met, such a fatality—that is, unexpected death at home of a twin baby, and particularly when both twins have died at or about the same time—would communicate with us.—We are, etc.,

R. T. COOKE.

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R. G. WELCH.

Department of Paediatrics,
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West Hartlepool,
Co. Durham.**Seasonal Variation in Leukaemia Incidence**

SIR,—I have been interested in the report by Dr. J. A. H. Lee (June 23, 1962, p. 1737) demonstrating a seasonal variation in the clinical onset of leukaemia among young people. Within each 5-year age-group under 20 years Lee found more cases beginning in the summer, with

a peak incidence in June, than in the winter; this excess was restricted to the acute lymphatic cases, with no seasonal variation occurring for myeloid leukaemia. In a letter (September 7, p. 623) Dr. Lee reported a similar variation for leukaemia among adults aged 20–44, with acute lymphatic cases again showing a summer peak.

Execution of a comparable nation-wide study in the United States is hampered by lack of a data resource equivalent to the National Cancer Registration Scheme of England and Wales, containing items on leukaemia cell type and month of first symptom. Nevertheless, information on the seasonal incidence of childhood leukaemia was obtained by preliminary analysis of results from the National Co-operative Leukemia Survey, a comprehensive epidemiologic study of leukaemic children under 16 years of age. Twelve medical centres located in various sections of the U.S. participated in this survey. The cases were diagnosed between 1958

Cases of Leukaemia in Patients Aged 0–15 by Season of Clinical Onset and by Cell Type; National Co-operative Leukemia Survey

	Mar.- May	June- Aug.	Sept.- Nov.	Dec.- Feb.	No. with Month of Onset Stated
Acute lymphatic	74	44	54	65	237
Acute myelocytic	15	12	11	19	57
Acute monocytic	8	4	4	2	18
Acute, other, and unspecified	41	54	49	45	189
Chronic	5	1	0	4	10
Total	143	115	118	135	511

and 1961, and the date of onset and cell type of leukaemia were abstracted from hospital records.

Of the 541 cases of leukaemia studied, the month of clinical onset was recorded in 511 instances. Utilizing the same groupings of months as Dr. Lee, an excess of cases with clinical onset during the winter and spring was found for most of the cell types (see Table). Only the category of acute leukaemia termed "other and unspecified"—many of which were stem-cell types—did not have this pattern, showing instead a slight summer excess. The seasonal distributions for all cases combined and for cases within each cell type were tested for statistical significance by the chi-square test, after correcting for variations in the length of calendar months. Significance was limited to the acute lymphatic type ($P=0.035$), which had a seasonal variation attributable mainly to its relatively frequent onset in the spring and infrequent onset in the summer.

The excess of cases of childhood leukaemia with clinical onset in the winter and spring months agrees with the seasonal distribution of acute leukaemia of all ages reported from a single hospital in the United States.¹ This distribution is possibly related to the prevalence during

these seasons of respiratory infections, which often occur during the early phases of leukaemia and may draw attention to the leukaemic process. The contrasting patterns between the U.S. and England and Wales, however, may reflect different seasonal distributions associated with enhanced recognition of leukaemia, increased host susceptibility to the leukaemic process, or specific environmental leukaemogenic factors.—I am, etc.,

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REFERENCE

- ¹ Hayes, D. M., *Cancer*, 1961, 14, 1301.

Infant Feeding During Ramadhan

SIR,—In reply to the queries made by Drs. Mary D. Ainsworth and Hebe F. Welbourn (November 2, p. 1129) I can speak from four years' experience in the Sudan.

Dispensation is allowed to pregnant women anyway. Since it takes the form of bidding the woman to make a fast in an equivalent way some other time during the year, she does not avail herself of it. She fasts at the time when others in the family are doing so. Pyelitis is a common result.

More detailed communication between religious and medical leaders might result in more suitable education towards a solution of these social habits so detrimental to these women and their children. Total dispensation is evidently necessary.—I am, etc.,

CHRISTINE KIRBY.

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Periodic Health Examination

SIR,—Your correspondence columns have often been amusing, but are becoming ludicrous. In your issue of October 26 (p. 1066) the honorary secretary of the Cancer Information Association suggests that an annual examination in shortened form would take a mere 20 minutes.

If we assume that a G.P. works only six days a week (no Sunday surgeries) and takes two weeks' holiday a year, then he can examine 2,500 people a year by spending only an extra two and three-quarter hours every working day on these examinations (or 3 hours 20 minutes for 3,000 patients). For those who work in town practices, and may work from 9 a.m. to 9 p.m. with a short break for lunch, these extra hours may save their patients' lives—but will certainly shorten the doctor's.

The idea, of course, is praiseworthy, but to try to implement it would seem to threaten further to reduce the dwindling supplies of general practitioners by earlier death. Can nobody suggest a more practical approach?—I am, etc.,

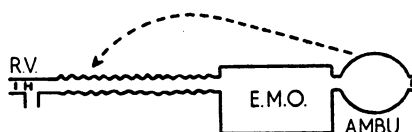
MICHAEL R. BOUNDY.

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The E.M.O. Inhaler and the Ambu Bag

SIR,—The E.M.O. quantitative inhaler¹ and the Ambu bag,² including the Ruben one-way valve for giving artificial respiration, were designed quite separately to meet different situations. These are now sometimes combined by anaesthetists, and they are held in reserve in many countries for emergencies, when they are likely to be used by less skilled personnel. A word of warning must therefore be given on the use of these in curarized patients.

As at present constructed the Ambu bag can be attached only to the inlet of the E.M.O. (see Fig.). If any rebreathing



occurs at the Ruben valve a comparable volume of gas passes back through the E.M.O. into the bag, and on inflation it passes yet a third time through the E.M.O., each time increasing the vapour concentration. Our experiments^{3,4} show that in fact a very considerable amount of rebreathing does occur, and that the volume increases when ventilation is performed by an untrained person.

The obvious dangers are:

- (1) A higher anaesthetic vapour concentration than the pre-set concentration.
- (2) Hypoxia, if air only is used as the vehicle.
- (3) CO₂ accumulation.

It must be pointed out that the E.M.O. was designed for use with the Oxford inflating bellows (O.I.B.) which is interposed between the inhaler and the patient. In this way the air is drawn through the inhaler into the bag at a relatively low pressure. This ensures that the O.I.B. becomes filled with the pre-set concentration of anaesthetic vapour. Firm compression of the distended bellows to inflate the patient in no way influences the concentration of vapour.

If the Ambu bag (or the O.I.B.) is attached to the inlet of the E.M.O. the firm compression necessary to inflate the lungs subjects the inhaler to a greater pressure than that for which it is designed. The result is that the inhaler delivers a concentration of vapour in excess of that indicated.⁵ It is evident, therefore, that with controlled ventilation the combination illustrated in the Figure will deliver concentrations of vapour considerably greater than the pre-set concentration. In two of our recent cases of gastric resection anaesthetized with halothane, for which agent the E.M.O. was designed, the result caused anxiety, and the result might have been unhappier still had the patients been less fit.

The danger of overdose would be excluded if the Ambu bag were to be placed between the inhaler and the

patient. This would necessitate minor modifications to the inlet of the bag.—I am, etc.,

H. J. CLEMENTSEN.

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REFERENCES

- ¹ Epstein, H. G., and Macintosh, R., *Anaesthesia*, 1956, 11, 83.
- ² Ruben, H., and Ruben, A., *Lancet*, 1957, 2, 373.
- ³ Wolff, G., and Clementsen, H. J., *Experientia*, in press.
- ⁴ Clementsen, H. J., Wolff, G., and Hügin, W., to be published.
- ⁵ Macintosh, R. R., *Brit. med. J.*, 1953, 2, 202.
- ⁶ — and Epstein, H. G., 1963, personal communication.

Enuresis

SIR,—I must agree with my former chief, Dr. Ian G. Wickes (November 9, p. 1199), that every effort should be made to help children with enuresis, but surely no one can agree when he says, "Not one single enuretic . . . will be helped . . . unless doctors . . . teach them to be dry by means of the buzzer."

I have about 12 children a year with enuresis brought to me during my very busy surgeries, and over the past eight years I cannot off-hand recall one single failure of treatment, and without using the buzzer—and most of these children showed great improvement within a week.

My treatment, basically, consists of establishing rapport with, and sympathy for, the child; obtaining the trust and confidence of the parent; a simple bedtime routine; and perhaps tabs. amphetamine sulphate at night to lessen the depth of sleep. Above all, the doctor must be able to "sell" the cure to the child and the parent.

In other words, the main agent in curing the child is not the tablets, nor the routine, nor a buzzer, but the doctor himself.—I am, etc.,

BASIL SELTZER.

Whitecraigs, Renfrewshire.

Portal Phlebotrombosis in the Puerperium

SIR,—In their report of three cases of this condition Mr. J. S. W. Chambers and Dr. R. A. Goodbody (November 2, p. 1104) make a plea that similar cases be reported. The following case occurred recently in this hospital.

A married woman of 31 attended the hospital antenatal clinic during her second pregnancy in 1963. Her first pregnancy three years before was complicated in the puerperium by a deep-vein thrombosis of the right leg, treated with anticoagulants for two weeks. The present pregnancy was uneventful until the 38th week, when an unexplained intrauterine death occurred. The onset of labour was spontaneous one week later and she was delivered normally of a macerated foetus on June 14. In the early puerperium she complained of epigastric discomfort after food which she had also noticed in the last week of her pregnancy. The only physical sign at this time was some tenderness in the epigastrium. A barium