gravidae. During all these years the Chelmsford group had perinatal mortality rates a good deal lower than those for the country or the region. It seems unlikely, therefore, that good unit rates were bought at the expense of unnecessary disasters in transferred cases.—I am, etc.,

DAVID CARGILL.

Maldon, Essex.

Urinary Antiseptics

SIR,—I am writing about your summary on nitrofurantoin (Berkfurin, Furodantin, Furan, Nitoin) which appeared in Today's Drugs (29 June, p. 812). Please allow me two comments on this excellent review.

Your statement that "nitrofurantoin is given in a dosage of 50–150 mg. six-hourly" should be modified. As you know we are the originators and developers of this drug and we recommend 50 to 100 mg. four times a day. A more accurate dose, especially used in children and patients of less than average size, is calculated on a basis of 5 to 8 mg./kg. (2.2 to 3.2 mg./lb.) of body weight/24 hours, not to exceed 400 mg./day.

Your statement that nitrofurantoin is a "urinary antiseptic" because it has "little systemic antibacterial effect" should also be clarified. We do not recommend Furadantin as a systemic antibacterial, but it does not necessarily follow that it should be classified as a urinary "antiseptic." The product is a specific urinary antibacterial. Although the whole issue is a matter of semantics it might be worth while trying to correct the confusion.

Since "antiseptics" are generally considered by most people to apply primarily to products for the home—such as gargles and certain cleaning preparations—the use of this term should be avoided for psychological reasons when referring to antibacterial drugs. In other words, the three terms "antibacterial," "antibiotic," and "antiseptic" refer primarily to the same thing—that is, antibacterial activity. The real question, then, is not what a product is called but how effective it is for the purpose recommended, and nitrofurantoin has been proved to be an effective urinary antibacterial.—I am, etc.,

A. J. BORRERO,
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Eaton Laboratories.

New York, U.S.A.

Urinary Tract Infection

SIR,—We read with interest the comments of Dr. David Brooks (21 September, p. 745). During the past nine months we have been studying patients with symptoms of acute urinary tract infection. The difficulty of making a clinical diagnosis has been painfully obvious. Of 143 patients with symptoms, 60 had no pyuria (defined as more than 10 pus cells per cu.mm. of uncentrifuged urine) or bacteriuria (defined as more than 100,000 organisms per ml. of urine), 33 had pyuria only, 53 had bacteriuria and pyuria, and 7 had bacteriuria only. Our findings are, therefore, roughly comparable to those of Dr. Brooks.

We have treated patients randomly with sulphadimidine and nalidixic acid, and, although our results are not yet complete, examination of the urine fourteen days after completion of therapy suggests that with either drug three-quarters of the patients have lost their pyuria and bacteriuria. It is too early to know whether longer follow-up will detect a significant difference between the efficacy of the bacteriostatic sulphonamides and the bactericidal nalidixic acid. We have found a very low incidence of strains resistant to sulphonamides—only one of 41 strains of *Esch. coli* and none of 7 *Proteus* strains.

There are several possible explanations for these discrepant results. Testing for sensitivity to sulphonamides is notoriously difficult. In the trial organized by the Bacteriology Committee of the Association of Clinical Pathologists[1] many laboratories wrongly reported a sensitive *Esch. coli* as resistant. Robertson,[2] who found a high incidence of strains resistant to sulphonamides, did not add lysed horse blood to neutralize sulphonamide antagonists in his medium. Dr. Brooks states a nutrient agar without para-aminobenzoic acid was used in his trial but Garrod and O'Grady[3] point out that other constituents of culture media may be inhibitory. The inoculum size is also highly critical. We suspend a small amount of growth in 10 ml. of sterile quarter-strength Ringer's solution and make a flood plate. This yields semi-confluent growth. Any inhibition of growth is taken to mean the strain is sensitive.

Sulphonamides have long occupied a pre-eminent place in the treatment of acute urinary tract infections. The evidence that the development of drug resistance makes their use less desirable is at present open to question.—We are, etc.,

P. C. C. BROWN.
M. C. DONAGHY.
P. H. DOOTSON.
D. M. MACLAREN.
D. H. M. TITCOMBE.

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Stepping Hill Hospital,
Stockport, Cheshire.

REFERENCES

1 Report on antibiotic sensitivity test trial organized by Bacteriology Committee of Association of Clinical Pathologists. *J. clin. Path.*, 1965, **18**, 1.
2 Robertson, M. H., *Brit. J. clin. Pract.*, 1968, **22**, 63.
3 Garrod, L. P., and O'Grady, F. W., *Antibiotic and Chemotherapy*, 2nd ed., 1968. Edinburgh and London.

Acute Epiglottitis

SIR,—Dr. J. D. Andrew and others have rightly drawn attention to the problem of acute epiglottitis (31 August, p. 524). In this centre the care of these children has been primarily by laryngologists, and I should like to draw attention to some additional aspects of diagnosis and treatment which have been fully recorded by Fearon,[1] who in 1962 described 4,148 children with croup seen over a seven-year period at the Hospital for Sick Children, Toronto. Seventy-eight of these were diagnosed as acute epiglottitis. In 1967 alone 16 children were treated for this condition.

The child with epiglottitis is usually sitting up and slavering, severely distressed by dyspnoea. Once alerted, it is inadvisable to attempt to see the epiglottis without instruments at hand to restore the airway immediately. Depression of the tongue is liable to precipitate complete occlusion of the airway. Deterioration may be sudden, so a "wait-and-see" policy is rarely justifiable. Immediate arrangements for bronchoscopy without an anaesthetic are advised. The supraglottic tissues are sometimes so oedematous and distorted that only a bronchoscope may be passed into the trachea. A light general anaesthetic may then be given and a formal tracheotomy performed. In Fearon's cases 69% required temporary tracheotomy, and no deaths occurred in his group with epiglottitis. Other authors have had similar experience.[2] Suitable antibiotics and humidification of the inspired air are essential adjuncts to tracheotomy in treatment.—I am, etc.,

R. STOREY FENTON.

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University of Toronto,
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REFERENCES

1 Fearon, B., *Pediat. clin. N. Amer.*, 1962, **9**, 1095.
2 Jones, H. M., *J. Laryng.*, 1958, **72**, 932.

Thalidomide

SIR,—After the lapse of time it may be reasonable to inquire if there has been any survey of the type of mothers who required or demanded the exhibition of thalidomide in the first three months of pregnancy. Here, surely, there is some abnormality.—I am, etc.,

RICHARD BELL.

Haydon Bridge,
Hexham, Northumberland.

Leukaemia and Reticuloses

SIR,—In the past few years there have been several surveys into clustering in leukaemia, but evidence of support has not always been forthcoming.[1] Since 1942 the Danish Cancer Registry[2] has kept cases of lymphosarcoma and reticulosarcoma registered separately, suspecting that the aetiological factor may be of viral origin, and that following leukaemia in association with lymphosarcoma and reticulosarcoma is necessary, as the diseases are closely related. If cases of lymphosarcoma and acute leukaemia occur together a common aetiological agent might be suspected.

I recently did a survey of death certificates in the borough of Paddington (population 115,000) for the five-year period 1963–7. This revealed 1,224 deaths from cancer, of which 79 were due to leukaemia and reticuloses. In this group 20% of the deaths were under 45, and 6 were under 14 (4 died from acute leukaemia, one from Hodgkins, and one from lymphosarcoma). This latter figure represented the total overall cancer deaths in this age group. The sex distribution was about equal, but there was a greater incidence of cases among the professional, executive, and white collar workers.

An investigation was done to find out the number of pairs of deaths not only in the same street but also in the same or neighbouring blocks of flats. I compared the incidence of pairing among cases of leukaemia-reticuloses, with stomach and colonic cancer as a control, and also cross-pairing between different groups—for example, stomach and leukaemia-reticuloses, stomach and colon. There were no overwhelming differences. Leukaemia-reticuloses comprised 43% of total cases, carcinoma of stomach 37%, of colon 30%, and cross pairing was also approximately the same. There was no pair-

ing among 25 cases of acute leukaemia and two pairs from 18 cases of chronic leukaemia. Cross pairing between reticuloses and leukaemia, however, showed that out of nine deaths from lymphosarcoma six of the deaths occurred in the immediate vicinity of one from acute leukaemia—that is, six cases of pairing. In Paddington there were 175 minor roads and blocks of flats considered in the range of 1,200 cancer deaths. As the number of acute leukaemia cases was 25, there could only be a one-in-five chance of this type of distribution of lymphosarcoma, and if all the minor roads and flats were considered the chance association would be more than one in 10.

My figures are obviously very small, but they do suggest an association between lymphosarcoma and leukaemia. If further epidemiological surveys could show an association between lymphosarcoma and leukaemia, then this would substantiate a viral factor as the aetiological agent.—I am, etc.,

London N.W.6. M. TOBIAS.

REFERENCES
1 Lock, S. P., and Merrington, M., *Brit. med. J.*, 1967, **3**, 759.
2 Clemmesen, J., *Pfizer Foundation Symposium*, ed. A. A. Shivas, 1967. Edinburgh.

G.P. Seniority and Consultants

SIR,—Quite recently (*Supplement*, 21 September, p. 118, and E.C.N.690) the Ministry of Health informed general practitioners they will not be paid their seniority awards unless they attend a certain number of postgraduate lectures. I do not wish to comment on the wisdom or otherwise of forcing professional men to attend lectures by financial sanctions, but only to say something about the consultants who one anticipates are meant to provide lectures and courses.

If a consultant is to give lectures or take part in instructional courses for general practitioners it is essential for him to be up to date in his subject and it is assumed by the Ministry of Health that this will be the case. However, unless the consultant is prepared to pay out of his own pocket most of the fees and expenses for attendances at lectures and meetings of learned societies, attendance at conferences at home and abroad, visits to other consultants' clinics at home and abroad, etc., he cannot expect to remain up to date for more than a few years after appointment.

Sums of money are allocated to regional boards to defray some of the expenses, but they are totally inadequate and the consultant goes cap in hand to his employing authority and often has to attend an interview before he is given any money. Quite frequently he is refused out of hand. Some boards say that financial assistance will only be given for a consultant to attend a course which is not where he wants to go. It is absolutely essential for consultants to be able to attend conferences to discuss problems with colleagues at home and abroad and to receive full expenses for doing so, and these restrictions must be removed. It should be possible for every consultant in the National Health Service to be provided with a sum of money each year for study and travel and this money should be provided as a right, and if not used one year it should be carried forward to the next year. It is my opinion that the minimum sum offered should be at least £100 per year for each consultant in the Health Service.

Now that the Minister has decided to force general practitioners to attend lectures one can only hope that the consultants will demand study leave with pay and full expenses on a realistic scale. The other alternative is to refuse to take part in postgraduate activities, and this may prove to be the only way one can gain any concessions from the Ministry of Health.

As clinical tutor to a so-far thriving postgraduate centre it is my duty to arrange a suitable number of lectures and courses and to offer small fees to lecturers. One does not know exactly how much it costs them to keep up to date, but I do know how much I have spent and many of my colleagues have done likewise. We are in fact subsidizing the Health Service in a private capacity. We have now reached a state of affairs ludicrous if it was not unjust when a consultant is expected to give postgraduate courses to general practitioners who will receive expenses and their seniority payments if they attend.

The consultant may expect to receive a small fee, which he often forgoes to provide equipment for his centre, provided his lecture is given out of his sessional time. He receives no fee if it is during working hours, although everyone knows that it is the preparation of the lecture at home or in a library which takes the time. If the consultant wishes to keep up to date he has to go to meetings and conferences and finance most of this himself, and if he is full-time no tax concession will be allowed. Although the Ministry of Health have recently agreed to be more generous with study leave for hospital staff they have not allocated additional funds for this purpose, and it is difficult to see how this promise can be kept.

There is still good will for the clinical tutor trying to arrange lectures, but it is my belief that it will soon disappear, unless regular paid study leave with all expenses becomes the right of all consultants in the Health Service, and unless all regional board contracts contain at least one session a week for teaching duties.—I am, etc.,

P. H. BEALES.
Doncaster Royal Infirmary, Doncaster, Yorks.

Reasons for G.P. Shortage

SIR,—At a recent reunion I was interested to learn that of my contemporaries who had entered general practice the majority had encountered great difficulty in obtaining parity of income and work-load with their senior partners, even after some years in the practice. I cannot help wondering if this apparently widespread difficulty may help to explain the shortage of young doctors willing to make a career in general practice.

There may be some significance in the fact that 30% of my fellow-graduates of 1958 are now working overseas. Is the Ministry wholly to blame?—I am, etc.,

J. C. SPENCE.
Birmingham 35.

Endocrine Abnormalities in Bronchial Carcinoma

SIR,—I find it rather difficult to understand the statement in your leading article on this subject (5 October, p. 5) that "The secretion of this substance [antidiuretic hormone] leads to an increase in plasma volume, which in its turn leads to secretion of aldosterone, and hence an excessive loss of sodium in the urine." Surely, the action of aldosterone is just the opposite of what you state: to increase sodium reabsorption from the tubular fluid, by its action on the proximal as well as the distal tubule. It causes *decreased* elimination of sodium in the urine.—I am, etc.,

PAUL CROSBY.
Marple Dale Hospital, Marple, Cheshire.

*** Dr. Crosby is correct. The word "decreased" was inadvertently omitted from the third sentence of the third paragraph. This sentence should have read: "The secretion of this substance leads to an increase in plasma volume, which in its turn leads to decreased secretion of aldosterone, and hence an excessive loss of sodium in the urine."—ED., *B.M.J.*

The Schweitzer Hospital

SIR,—Three years have passed since the death of Dr. Albert Schweitzer and on 4 September a memorial ceremony was held at his grave under the palm trees beside the Ogowe River. It was conducted by Dr. Walter Munz, the Swiss surgeon, who last year visited England and appeared on television as the man Schweitzer himself had chosen to succeed him. Among those present was Dr. James Pindred from St. Bartholomew's Hospital who has been sent out by the British Fund to join the staff. He received a warm welcome, for he had been previously a helper there in his student days, and he writes enthusiastically about the fine quality of his colleagues and the progressive plans for the future of the hospital. These will shortly be discussed by the committee of direction in Strasbourg.

An urgent request has come for a Land Rover, and the firm is willing to let us have one at a discount, and Père Noël informs us that it will be much more valuable than a sleigh when he visits Lambaréné at Christmas. Perhaps friends and admirers of le Grand Docteur whose portrait hangs in the galleries of the Royal College of Physicians, will help to make this gift. They also require an active general surgeon as a locum for a few months, which could be counted as study leave.—I am, etc.,

CLEMENT C. CHESTERMAN,
Chairman, Schweitzer Hospital Fund.
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Points from Letters

Coronary Heart Disease

Dr. J. NICKSON (Newbury, Berks.) writes: In your leading article on the prevention of coronary heart disease (21 September, p. 689) there was failure to mention Yudkin's work[1] on the effect of dietary sucrose.

REFERENCE
1 Yudkin, J., and Roddy, J., *Lancet*, 1964, **2**, 6.