Dipyron in Bronchial Asthma

SIR,—We have found that premedication with dipyron before bronchoscopy makes the passage of the bronchoscope easier. We have also found dipyron to be an effective postoperative analgesic (mainly after abdominal surgery) when given on the second or third day after operation, and that in the patients in whom it was effective there was an increase in gas exchange in the lungs. This was perhaps due to deeper respiration resulting from the relief of pain, because there was no change in the respiratory minute volume after dipyron in 20 healthy persons.

These findings prompted us to try dipyron in 82 patients suffering from an attack of asthma. In every case 2.5 g of the drug given intravenously interrupted the attack, and seven of the 82 patients were in status asthmaticus. In 31 of the 75 patients with acute asthma other drugs (aminophylline, orciprenaline, or hydrocortisone semisuccinate) had already been given without effect. In all the patients the intravenous injection of dipyron resulted in the immediate disappearance of cyanosis and relief from the feeling of suffocation. In the seven patients with status asthmaticus the condition had been present for two to three days and had not been relieved by the usual pharmacological agents. One of the patients needed a second injection of dipyron.

I think the effectiveness of dipyron in bronchial asthma needs further investigation, but I thought I should report the above findings now because of Vane's discovery¹ that aspirin-like drugs act by inhibiting the biosynthesis of prostaglandins. Dipyron belongs to this class of drugs. It is also known that prostaglandins E_2 and $F_{2\alpha}$ exert opposing effects on the airways resistance in man.^{2,3} The bronchoconstrictor action of prostaglandin $F_{2\alpha}$ is 10,000 times stronger in asthmatic patients than in healthy subjects.⁴ Recently Flower and Vane⁵ have described the selective inhibition of prostaglandin synthetase in brain by the antipyretic drug paracetamol. Dipyron is a weak analgesic, antipyretic, and anti-inflammatory drug. Could it be that dipyron is a selective inhibitor of the biosynthesis of prostaglandin $F_{2\alpha}$ in the lungs?—I am, etc.,

STANISLAW HADY

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¹ Vane, J. R., *Nature New Biology*, 1971, **231**, 232.

² Cuthbert, M. F., and Smith, A. P., Abstracts of International Conference on Prostaglandins, Vienna 1972. To be published.

³ Weeks, J. R., *Annual Review of Pharmacology*, 1972, **12**, 317.

⁴ Mathé, A. A., Hedqvist, P., Holmgren, A., and Svanborg, N., *British Medical Journal*, 1973, **1**, 193.

⁵ Flower, R. J., and Vane, J. R., *Nature*, 1972, **240**, 410.

Dip-slide in Urology

SIR,—My colleagues and I recently evaluated the Uricult dip-slide in gynaecological practice and came to the same conclusion as Mr. F. R. Jackaman and others (27 January, p. 207).¹ However, we were able to enhance the usefulness of this technique by testing for bacterial sensitivity to antibiotics. This was achieved by placing antibiotic sensitivity discs on the lower end of the dip-slide, the film of urine being sufficient to

hold them in place. Sensitivity to the antibiotic is easily seen as a clear zone of inhibited bacterial growth around the disc (see fig.).

By using this method the practitioner can, within 24 hours of taking a clean-catch specimen of urine, detect the presence of

clinically significant bacteriuria (with at least as high a degree of accuracy as the standard laboratory method) and be guided with regard to chemotherapy. This will allow a more selective use of skilled laboratory staff, reduce the interval before commencing treatment, and be considerably cheaper for the patient.—I am, etc.,

M. NOTELOVITZ

Durban, South Africa

¹ Bailey, M. J., Neary, J. T. F., and Notelovitz, M., *South African Medical Journal*, 1972, **46**, 1323.

Sleep and Growth Hormone

SIR,—I was surprised and perplexed to note in your leading article (27 January, p. 188) reviewing stimuli of growth hormone secretion the general conclusion that "insulin-induced hypoglycaemia remains the procedure of choice when investigating the anterior pituitary's capacity to secrete growth hormone." Alternative praise was assigned to glucagon as a stimulus and, in this capacity, glucagon was rated above arginine on the basis of study in a small number of subjects.

While I might discuss the known and hypothetical differences in the mode of growth hormone stimulatory action of each agent or argue that the total available data do not necessarily leave the hazardous insulin-induced hypoglycaemia the stimulatory agent of choice (or glucagon the best alternative), I would like to merely point out that natural sleep is undoubtedly the phenomenon (not an artificial agent) with which to study growth hormone release. I believe this statement is substantiated in the literature.¹⁻¹¹

In six years' experience in the study of more than 350 subjects sleep has provided an exceptionally and incomparably reliable tool with which to study the natural release of growth hormone in normal subjects as well as in subjects with aberrations in growth and metabolism. Moreover, a single blood sample drawn during the first 60-90

minutes after sleep onset affords a reliable measure of growth hormone release and does not require artificial provocation.¹⁰⁻¹¹—I am, etc.,

RONALD W. GOTLIN

University of Colorado Medical Center,
Denver, Colorado, U.S.A.

¹ Takahashi, Y., Kipnis, D. M., and Daughaday, W. H., *Journal of Clinical Investigation*, 1968, **47**, 2079.

² Parker, D. C., Sassin, J. F., Mace, J. W., Gotlin, R. W., and Rossman, L. G., *Journal of Clinical Endocrinology and Metabolism*, 1969, **29**, 871.

³ Gotlin, R. W., Mace, J. W., and Silver, H. K., *Lancet*, 1971, **1**, 626.

⁴ Quabbe, H. J., Bratzke, H. J., Siegers, U., and Elban, K., *Journal of Clinical Investigation*, 1972, **51**, 2388.

⁵ Sassin, J. F., et al., *Science*, 1969, **165**, 513.

⁶ Sassin, J. F., et al., *Life Sciences*, 1969, **8**, 1299.

⁷ Gotlin, R. W., and Dubois, R. S., *Gut*, in press.

⁸ Lucke, C., and Glick, S. M., *Journal of Clinical Endocrinology and Metabolism*, 1971, **32**, 729.

⁹ Vigneri, R., and D'Agata, R., *Journal of Clinical Endocrinology and Metabolism*, 1971, **33**, 561.

¹⁰ Mace, J. W., Gotlin, R. W., and Beck, P., *Journal of Clinical Endocrinology and Metabolism*, 1972, **34**, 339.

¹¹ Mace, J. W., Gotlin, R. W., Sassin, J. F., Parker, D. C., and Rossman, L. G., *Journal of Clinical Endocrinology and Metabolism*, 1970, **31**, 225.

Cremation Certificates

SIR,—Dr. I. E. Doney (10 March, p. 616) may be a little optimistic in his belief that cremation fees will soon be things of the past. Acceptance of the Brodrick Report will first have to be translated into legislation that repeals the Cremation Act of 1902 and its subsequent regulations. In the present crowded Parliamentary timetable who can say when this might be? It would appear just as likely that this report will share the fate of so many reports commissioned by Government and be shelved indefinitely.

Though I myself have never come across form H (a certificate of anatomical examination) in over 16,000 consecutive cremations, I am able to enlighten him about form G. This is a record, bearing a serial number of each cremation, kept by the superintendent of the crematorium and not normally, therefore, seen by a doctor.—I am, etc.,

J. A. G. GRAHAM

Health Department,
Worthing

SIR,—Dr. I. E. Doney (10 March, p. 616) asks about form G. This is the Register of Cremations kept by the registrar of the cremation authority in accordance with Regulation 17 of the Cremation Regulations, 1930.—I am, etc.,

W. P. CARGILL

Southampton

Treatment with Calcitonin

SIR,—Your leading article (17 February, p. 371) on treatment with calcitonin prompts me to suggest that patients for whom calcitonin therapy is being considered should be examined to see if they are suffering from deafness. With pure-tone and impedance audiometry it should be possible to establish if fixation of the stapes is the cause of their deafness. It would then be interesting to see if any improvement of hearing occurs with calcitonin therapy. Such an improvement in hearing has been recorded.¹

I feel that unless such an investigation is carried out on a nationwide basis sufficient

cases will not be seen to establish the real change in the hearing of patients on calcitonin therapy.—I am, etc.,

P. B. O'NEILL

Whiston Hospital,
Prescot, Lincs.

¹ Shai, F., Baker, R. K., and Wallach, S., *Journal of Clinical Investigation*, 1971, **50**, 1927.

should be harrying: it is they who are responsible for our patients' present sufferings, not our parloously paid colleagues driven by harsh and unfair policies to take desperate action.—I am, etc.,

G. P. A. WINYARD

Oxford

secondarily to train specialists. Thus service needs must take priority over training facilities. Lest one cries "exploitation," I would pay the sub-consultants (better termed specialists) on the consultant scale.—I am, etc.,

J. P. TURNEY

Whitehaven, Cumberland

Strikes by Hospital Ancillaries

SIR,—In your leading article (10 March, p. 568) you write that "nobody should condone the present selective strikes of hospital ancillary workers," note that "the take-home pay of a hospital porter may be the same as the price of a good meal for four in a London restaurant," and go on to suggest that "once the freeze is over, doctors should lend their support" to the "greater medical profession" of hospital ancillaries.

When was the last *B.M.J.* leading article on the pay of non-medical staff? If it takes a strike to provoke clear-cut editorial comment, how much more is it necessary to put effective pressure on Governments, both varieties of which hold down the wages of the lower paid in the name of (eventually) raising them.

Hospital ancillary staffs have not speculated in international currencies, invested capital abroad, spent company profits on privileged living for directors instead of modernization of plant, raised rents to whatever a lunatic market can stand, speculated in urban land, spent millions on unproductive forms of competition like advertising, or maintained armies of accountants in campaigns of tax evasion. Inflation is the increase of price without corresponding increase in value; hospital workers have not contributed to this, nor would they do so if their claim were met.

People must eat, fares must be paid, mortgages and rents cannot be put off; every family has its breaking point. All of us have known that this was the situation for hospital workers for a very long time; all of us know fine people who have left the service because they could no longer afford to remain in it, often to take up less socially valuable employment; and we have done nothing about it. We have a clear moral duty to say that this strike can and must be ended immediately, by meeting the hospital workers' demands in full.—I am, etc.,

JULIAN TUDOR HART

Port Talbot, Glam

SIR,—With reference to your leading article (10 March, p. 568) I would like to state that I, in common with many other doctors, not only condone but firmly support this strike. Of course patient care is suffering—the question is, whose responsibility is this? It is an emotionally satisfying response, but a gross over-simplification, to blame all the consequences of a strike on the strikers.

If the Government feels able to undermine the health of the country with a tax concession of £100 million on confectionery and soft drinks, it can certainly afford to show its concern for the health of those at present in hospitals and on waiting lists by restoring the standard of their care through a generous offer to the ancillary workers. It is the Government that we, as a profession,

Expansion of the Consultant Grade

SIR,—The names Spens, Platt, Freeman and Todd are quoted from article to article so that they gain the familiarity of the kings and queens of England in a historical text. Now, Mr. F. S. A. Doran (*Supplement*, 10 March, p. 71) will join the cavalcade of people who have "solved" the staffing problem of hospitals. My first impression of this article was that you, Sir, had been hoaxed. Can Mr. Doran really be proposing a scheme which, if implemented, would probably increase the number of unfilled consultant jobs which Mr. J. Shipman (10 March, p. 618) quotes as standing at 837? How the "triple contract" system is to be applied to medicine, geriatrics, or anaesthetics is not explained, but if one were to set out to devise a more unsatisfactory and unsatisfying career prospect for a surgeon, one would be exercised.

The first 11 years, we are told, is to be spent doing half the surgery of the hospital—namely, that of the emergencies. Even if supplied with an "occasional cover" by a consultant on his second contract his hours on call would be intolerable. A 4% increase per annum in consultant posts would take years to give him a second man, and even then the two would be on call some 70 hours per week, assisted by half a house surgeon and a sixth of a registrar.

After 11 years his reward would be the benifice of doing the bread-and-butter surgery—apparently a delight in private practice but a chore in the public wards. "Varicose veins, herniae, non-acute appendices, and piles" are quoted as his daily work. He would also help with outpatients, presumably making decisions on patients who would be operated upon by his senior colleagues.

Only after 22 years can the man lead some sort of balanced surgical life. Is it truly proposed that his lists should be all major cases? The phrase that he would "have the contractual right to transfer [cases] to one of his junior colleagues" is unhappily reminiscent of the autocracy exercised by some medical superintendents before the war. This senior man spends the rest of his time doing administration and following his special interests, if these have not atrophied in his 22 years of inconvenience and tedium.

To my mind the multiplicity of abortive schemes indicates that the basic thinking is wrong in two respects. Firstly, we will never get a workable system until we drop the dogma of the untouchability of the non-consultant grade. All other hierarchical structures have permanent intermediate posts filled by men who do not consider themselves failures. Not all bank clerks become managers, or teachers headmasters, or vicars bishops. If we cannot soon put our house in order, the Department of Health and Social Security will be entitled to cut the strangling string of self-interest and to impose a solution. Secondly, hospitals are primarily paid for by the nation to treat patients and only

SIR,—Mr. F. S. A. Doran's proposals (*Supplement*, 10 March, p. 71) for the much-needed improvement of the hospital career structure will, I believe, fail to be implemented for two reasons. The first is numerical, because in the context of district general hospitals it will be impossible to accommodate three phases of consultant contract into the small subspecialties and it will take about 25 years to get them all "into step" in the larger specialties.

The other reason is the emotional intransigence of the Regional Hospitals' Consultants and Specialists Association. They see the many registrars in the teaching hospitals deputizing for their consultants during the day and completely absolving them from emergency duty at night. There is some justification for much of this view and in addition there are daily examples of the teaching hospitals successfully resisting attempts by the Health Departments to redistribute registrars more evenly throughout the hospital service.

I suspect that the R.H.C.S.A. would be prepared to consider Mr. Doran's proposals after an equitable distribution of registrars had been implemented. But something more persuasive than pious hope is necessary. Registrars doing service work are clearly assisting consultants and this assistance allows that consultant to devote more of his time to committee work, research, private practice, or even leisure. In theory, consultants throughout the hospital service have the same pay and conditions, but in practice there is a considerable difference because registrar assistance is much more generously provided in the teaching hospitals. The important point is that all registrars are provided free (to the consultant) by the Health Department. If there is to be true equality of pay and conditions of service in practice among all consultants in the hospital service there are only two alternatives: (1) registrar "assistance" should become evenly distributed, or (2) the present maldistribution should be compensated for financially. Implementing the second might well bring about a favourable change in the first.

It is fairly easy to establish for all the consultants in each specialty a mean registrar-consultant ratio, which in some specialties may even now approximate to the ideal training:career ratio. Consultants who have been provided with registrar assistance in excess of this mean would suffer a deduction from their salary, and consultants who now have little or no registrar assistance would qualify for an allowance during the time their registrar assistance fell below the mean for their specialty. To be effective the deductions and allowances should be large, but whatever their size the cost to the Health Department will only be that of administering the transfer.

It will be argued that some teaching hospital departments of international renown are mainly staffed by registrars who are foreign graduates on secondment to this