follows: "The experimental evidence given in the present paper does not . . . support the view that the use of asthma inhalers containing isoproterenol will result in death due to the cardiotoxicity of the isoproterenol, or the fluorocarbon propellants, or to the interaction of isoproterenol and hypoxia." This is the direct opposite of the position taken by Dr. Archer, who offers no work of his own to support his views.

In referring to the work of Brooks, *et al.*,[10] Dr. Archer neglected to state that the occasional electrocardiographic changes seen after inhalation of propellants and isoprenaline were assessed by the authors as being inconsequential. In another experiment conducted in man,[11] two subjects were exposed to 1% fluorocarbon 12 for 2·5 hours and the E.C.G. continuously monitored. No abnormalities were observed.

A study which provides conclusive evidence of the safety of fluorocarbons 11 and 12 in clinical use was conducted in Germany.[12] Ten patients severely ill from a bronchopulmonary disease with a mean Pao_2 of 54·9 mm Hg and $Paco_2$ of 47·2 mm Hg were given 10 inhalations of a propellant gas mixture during 10 consecutive breaths. No significant E.C.G. changes were observed. It would appear from this and other published data that Dr. Archer's apprehension about the safety of the pressurized bronchodilator inhalers in asthmatic patients is entirely unwarranted. I am, etc.,

ALEX SILVERGLADE

Riker Laboratories,
Northridge,
California

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Diagnosis of Childhood Spinal Muscular Atrophy

SIR,—Following your leading article (6 October, p. 2), I would like to draw readers' attention to the electromyographic findings in spinal muscular atrophy, and in particular to a phenomenon described by Buchthal and Olsen[1] from Copenhagen which appears to be pathognomonic of this condition. In addition to the usual findings in anterior horn cell disease, three-quarters of their patients showed regular spontaneous motor unit activity in relaxed muscle and in sleep. The frequency of these spontaneous discharges varied between 5 and 15/sec.

Since this report appeared I have looked for this phenomenon in many children with neuromuscular diseases. Up to the present I have found such activity in most children who prove to have spinal muscular atrophy and not in any other condition. It can be found with needle or even surface electrodes providing one waits for relaxation to occur and may then continue for many minutes. It is doubtful if, in a child with the typical clinical picture and these electromyographic findings, a muscle biopsy is required for diagnostic purposes.—I am, etc.,

B. G. R. NEVILLE

Department of Paediatrics,
Guy's Hospital,
London S.E.1

1 Buchthal, F., and Olsen, P. Z., *Brain*, 1970, **93**, 15.

Drug-induced Respiratory Disorders

SIR,—We read wth interest your leading article on this subject (12 May, p. 320). In the paragraph dealing with pulmonary hypertension induced by appetite-suppressing agents, however, it is stated that this side effect cannot be reproduced in animal experiments. This statement, however, is valid only up to three years ago. In the meantime several reports have been published about this problem.[1-7] A more detailed study on the mode of action of anorectic drugs inducing pulmonary hypertension is to be published shortly.[8]

All these papers clearly demonstrate the hypertensive effect of certain anorectic drugs on the pulmonary circulation in animals. —We are, etc.,

K.-U. SEILER
O. WASSERMANN

Institut für Pharmakologie,
Christian-Albrechts-Universität,
Kiel

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Pyridoxine and Parkinsonism

SIR,—In the treatment of Parkinsonism with levodopa it is often necessary to prescribe drugs to combat the nausea which occasionally occurs. It has been my practice to prescribe metoclopramide.

Recently some of my patients have relapsed with no alteration in the dose of levodopa and I discovered that these patients had had prescribed for them anti-nausea preparations containing pyridoxine.

I should like to draw attention to the fact that pyridoxine is contraindicated in patients with Parkinsonism and preparations which contain this drug should therefore not be used.—I am, etc.,

A. BARHAM CARTER

Neurological Unit,
Ashford Hospital,
Ashford, Middlesex

Giardiasis in England

SIR,—Two young men have recently been admitted to this department for investigation of persistent diarrhoea associated with the passing of pale, bulky stools and significant loss of weight. Both had just returned from a visit to India and stool cultures taken by their general practitioners were negative for pathogens. Microscopy of the stools, however, revealed numerous cysts of *Giardia lamblia*. Both patients were treated with metronidazole (Flagyl) with relief of diarrhoea and regain in weight.

This summer we have also seen an outbreak of giardiasis in a group of children who had just returned from a school cruise in the Mediterranean. Some of these children complained of abdominal pain and at least one was referred to a surgical unit.

G. lamblia is found throughout the world but is most common in tropical countries. Giardiasis normally presents as a mild enteritis, but severe infection of the small bowel may lead to malabsorption, which can lead to diagnostic difficulty unless microscopical examination of the stools is carried out. With increasing foreign travel giardiasis is likely to become more common in Britain. —I am, etc.,

A. M. GEDDES

Department of Communicable and Tropical Diseases,
East Birmingham Hospital,
Birmingham

Late Advertising of Hospital Posts

SIR,— Dr. T. D. Culbert's letter (13 October, p. 111) *does* require some comment. There are at least two good reasons for his four applicants neither attending for interview nor informing the hospital. They may never have received invitations to attend or these may have arrived too late. In any case, a well-run administration asks the candidate to confirm that he will attend. If no reply is received no one should be surprised if the candidate does not appear at the interview, though someone might trouble to check the clerical procedures.

Unlikely? Not at all. Last year I got 48 *hours'* notice to attend an interview for a consultant post at a London teaching hospital, and this only because I happened to ring the hospital on that day. The other candidates (who lived in London) had just 24 hours' notice.—I am, etc.,

ROGER HOLE

North Ormesby Hospital,
Middlesbrough

Medically Oriented Language Courses

SIR,—I have some reservations about the value of medically oriented language courses as suggested by the Chairman of the Medical Education Panel (8 September, p. 546). Let us, by all means, learn European languages to help us to become good Europeans and to participate in the riches of European culture. But the difficulties in communicating in a foreign language have little relation to technical words, which are usually easily recognized though they may have a French, German, or Italian form. Some years ago[1] I drew attention to the fatuity of publishing Russian dictionaries of medical terms, when in fact the only problem in many cases was

reading the Cyrillic characters. By far the easiest aspect of learning any foreign language is the use of technical words. The day has happily passed when nationalist pride demanded that technical terms should have a linguistic purity uncontaminated by international usage. As a postgraduate student in Germany in 1936 I had a booklet which suggested suitable Germanic equivalents for scientific and medical terms in common use. For *Mitralstenose* the recommended alternative was *Bischofsmützeklappenunzugänglichkeit.*" The chances of this happening again are very remote.

At the risk of being branded a xenophobe I would also suggest that it is not necessary to set up organizations to ensure that scientific papers in other languages are immediately translated into English. There are already far more papers than we can ever read published in English, and anything of any value in any other language in the world will sooner or later appear in English. The foreign scientists themselves will see to that. The more important it is the sooner it will appear. In fact this forms a useful sieve which selects information of foreign origin for English-speaking readers. Of course there will be valuable papers in other languages which must be consulted in the original, but it is time enough to do so when we know it is necessary, and not just to practise our Danish, Portuguese, and Hungarian. Thanks partly to the American contribution to scientific work, the advantages of being born a native English-speaker are now immense. Learning other languages still has an enormous value and interest but the main value is not to follow the scientific literature. —I am, etc.,

D. H. SMYTH

M.R.C. Unit for Metabolic Studies in Psychiatry,
Middlewood Hospital,
Sheffield

1 Smyth, D. H., *British Medical Journal*, 1960, **1**, 1561.

Physiotherapy Service

SIR,—There has been a spate of correspondence in both the medical and the lay press about the role and conditions of service, including salary structure, of physiotherapists.

I *know* that physiotherapy provides an essential service, and not only to those who are physically disabled in the traditional sense of musculoskeletal dysfunction. It needs, as any other therapy, to be prescribed with due discrimination, adequate dosage, and full co-operation between the consultant concerned and the physiotherapist. In addition, progress should be monitored at intervals again by joint consultation. Only in this way is maximum benefit to the patient likely to be achieved.

As a physically disabled doctor whose rehabilitation has progressed well, I am painfully aware of the pressing need for extended physiotherapy services within our hospitals and also for mobile units to increase facilities for home-based physiotherapy of special importance to the severely disabled with transport difficulties. This cannot always be covered by the ambulance service, however efficient this might be.—I am, etc.,

MABEL L. HAIGH

Collingham,
Wetherby, Yorks

Who'd be a Physiotherapist?

SIR,—Dr. N. R. Clitherow inquired (6 October, p. 53) how he and his colleagues might be of practical help in improving the pay of physiotherapists and members of other poorly paid health professions. Dr. Clitherow, Dr. M. M. Salzmann (8 September, p. 544) and many of their colleagues are known to be genuinely concerned about the low pay of members of the paramedical professions, which Lord Goodman recently described when addressing physiotherapists at their annual congress as "pitifully inadequate in terms of the services you render." How to translate their concern into action?

Doctors are the acknowledged leaders of the health teams and their most influential members. But as they differ from all other health service employees in enjoying an independent pay review they lack the urgent personal stimulus to attack the root cause of the trouble, the Whitley Councils. For the paramedical professions these councils are not negotiating bodies in any true sense. The management sides have no effective negotiating power and are used by the Department of Health and Social Security officials who manipulate them as instruments of whatever happens to be the Government's current pay policy. With few exceptions the professions concerned have been subject to the Government's pay code, not since November 1972, when stage I of the present restraint programme was first imposed, but continuously since the National Health Service was established in 1948. The few exceptions are those which are fortunate enough to offer employment prospects outside the N.H.S. such as the medical laboratory technicians who are linked to the Scientific service, the pharmacists, and more recently the social workers whose pay, following the Butterworth Report[1] is now linked to that of their local authority counterparts.

I suggest that those doctors who are aware of the facts and are concerned about them take steps themselves and encourage their colleagues, through their professional organizations, to make the weight of their opinion felt in the D.H.S.S. and in Parliament. The real answer to the difficulty should be the extension of the independent periodical review to cover all professions whose members do not have signficant employment opportunities outside the N.H.S. If this is unobtainable, two things are needed: a thorough overhaul of the Whitley machine to enable the management sides to negotiate; and the recognition by the Government of its obligations towards its hospital employees.—I am, etc.,

J. ROSE
Secretary,
Chartered Society of Physiotherapy
London WC1

1 Department of Employment, *Report of the Butterworth Inquiry into the Work and Pay of Probation Officers and Social Workers*. London, H.M.S.O., 1972.

Professional Charges

SIR,—By publishing only a part of my previous letter (6 October, p. 53) and thus obscuring my intended sarcasm you made it appear that I was criticizing Dr. J. M. Laurent (1 September, p. 503), whereas I was in fact supporting him.

Let me be more direct. Of course the general practitioner is undervalued if one compares his item-of-service payment with almost any other industry. My wife recently paid more to get a haircut than I would receive for accepting full responsibility for the care of a temporary resident for three months. This is a direct valuation of my services as I cannot claim a capitation fee for a temporary resident.

The general practitioner is not badly paid —his earnings compare well with those of a good bricklayer or a junior executive in industry. It is the enormous workload and the total responsibility that he has to bear that make the financial rewards seem inadequate. This situation is perpetuated and encouraged by our stupid acceptance of the Review Body method of determining our pay and the capitation system upon which it is based.

Let us scrap this God-like body which condescends to tell us how much we should receive each year while virtually ignoring the actual work involved in earning our wage. Would they dare to put their price on each item of service? We should tell the Government what we think we are worth and demand reasonable fees. Our astronomical incomes might then stimulate facilities to train more doctors and then everyone would benefit.—I am, etc.,

JOHN EGERTON

Pangbourne

Points from Letters

Propellant a Factor in Asthma Deaths?

Dr. R. D. LAST (Street, Somerset) writes: I have in my possession a Ventolin inhaler which continues to release the drug so long as the plunger is depressed. The manufacturers inform me that this is a rare fault in the metering valve though I question whether they can know its true incidence for a user would not necessarily recognize the problem as a fault. Admittedly even a full Ventolin aerosol probably does not contain a toxic dose of salbutamol, but if Dr. V. E. Archer (29 September, p. 696) is correct, then a user might well unwittingly receive an excess dose of propellant.

Are PUFA Harmful?

Mr. R. WATTS (Flora Information Service, London W.1) writes: In your leading article (6 October, p. 1) you quote the study of Pearce and Dayton,[1] which is widely interpreted as indicating a higher incidence of cancer among people on a PUFA-supplemented diet than on a normal diet. Closer study of this paper shows in fact (table V) that people in the group which suffered the highest incidence of cancer were those who *failed* to adhere to the high-PUFA diet. And in fact those showing better adherence to the high-PUFA diet had a lower incidence of cancer than those on the control diet, though this difference was not statistically significant. The pooled results from this and four other trials,[2] reflecting a very large experience of the PUFA-supplemented diet, suggests a lower incidence of cancer among those receiving this diet.

1 Pearce, M. L., and Dayton, S., *Lancet*, 1971, **1**, 464.
2 Ederer, F., Leren, P., Turpeinen, O., and Frantz, I. D., *Lancet*, 1971, **2**, 203.