discontinuation of the therapy and the patient with intractable diarrhoea relapsed while on therapy and died. No response was observed in the patient with acute myeloblastic leukaemia after two months of continuous therapy. No adverse or side effects were noted.

On the basis of this limited experience we believe that loperamide is a valuable adjunct to the management of life-threatening diarrhoea of varying aetiology and that further studies are warranted in larger series of patients.—We are, etc.,

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1 Dubru J. M., and Lambrechts, A., *Revue Médicale de Liège*, 1974, 29, 579.

Screening of the Newborn for Duchenne Muscular Dystrophy

SIR,—Your leading article (24 May, p. 403) raises the following questions concerning the method proposed by Zellweger and Antonik.¹

(1) Is the test ethically justified? Yes—at least that is the opinion of most parents of children with Duchenne muscular dystrophy (D.M.D.). We asked D.M.D. parents the following question: Would you have liked to have been informed at the time of birth that your child would eventually develop D.M.D.? Seventy per cent. of the parents with one D.M.D. child and 80% of the parents with more than one D.M.D. child answered "yes." The following reasons for their affirmative answers were given: "We would have selected another house (one storey with ramps and no steps, with wider doors to circulate more easily with the wheelchair, etc.)." "We would have moved to a town with better educational facilities for the handicapped than we have in our town." "We would have guided the child's interest in different directions than sports and physical activities." "We would not have disciplined our child so frequently for stumbling and falling when he was a toddler." "We could have prevented the birth of our affected son(s)." "We would have begun earlier with physical therapy and contracture prevention."

(2) Is screening financially justified in a disease as rare as D.M.D.? Yes, since the cost of the proposed firefly test is less than one dollar per sample, which is well within the cost range of other screening procedures and since D.M.D. is not at all a rare disease. The incidence of D.M.D. has been estimated to be 1 in 3600 liveborn boys.² Thus D.M.D. is more frequent than phenylketonuria or galactosaemia, for which screening is widely accepted.

(3) Is D.M.D. a preventable disease? Yes, it is in some instances. We have presently in our files 175 D.M.D. patients who came from 144 sibships. Thus 31 of them (17.8%) were born after one D.M.D. child was already in the family. These second and later cases could have been prevented if the D.M.D. of the first affected child had been diagnosed at birth or soon thereafter since a reliable method for carrier detection (in vitro protein synthesis by muscle ribosomes) is now available.³ Thus the possible prevention of 17-18% of all cases of D.M.D. would certainly justify this D.M.D. screening pro-

cedure. Screening of the newborn for D.M.D. can no longer be considered "controversial," as suggested in your article, so far as the medical and genetic aspects are concerned.—We are, etc.,

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1 Zellweger, H., and Antonik, A., *Pediatrics*, 1975, 55, 30.

2 Morton, N. E., and Chung, C. S., *American Journal of Human Genetics*, 1959, 11, 360.

3 Ionasescu, V., Zellweger, H., and Conway, T. W., *Neurology*, 1971, 21, 703.

Airlift from Darwin

SIR,—Professor Philip Rhodes (16 August, p. 419) gives an account of the problems, medical and other, which followed the destruction of the city of Darwin by cyclone Tracy early on Christmas morning 1974.

While I appreciate that it would be impossible for Professor Rhodes to mention in detail the excellent work contributed by many people under the most adverse conditions during the Darwin emergency, I think it might be appropriate to record the role played by Australian civil aviation. Professor Rhodes mentions that the R.A.A.F. uplifted 22 000 people from Darwin. This total could be accurate, but our information leads us to believe that about 25 000 people in total were airlifted out of Darwin from 26 to 30 December. Of this total, Qantas Airways carried 4925, T.A.A. 3893, Ansett Airlines 3608, MacRobertson Miller Airlines 1004, and Connair 818—a total of 14 248. This left the R.A.A.F., assisted by the United States Military Airlift Command and one aircraft from the Royal New Zealand Air Force, carrying 10 752 people.

There is no criticism of the R.A.A.F. implied in this, nor have I any wish to enter into a comparative discussion of the work done by different organizations. In the Darwin emergency many pitched in and did whatever they could. Among this group were many people within the Australian civil aviation industry. Two Qantas medical officers positioned to Darwin on the first flight early on the morning of 26 December remained there for the following five days and the airline's nursing sisters who were positioned to Darwin worked on board all Qantas flights from Darwin to Sydney.—I am, etc.,

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Sick Sinus Syndrome

SIR,—Dr. R. Sutton and his colleagues (9 August, p. 367) are correct in stating that in the past the aetiology of the sick sinus syndrome (sinoatrial disease) has been attributed to coronary artery disease. However, post-mortem evidence for this is extremely sparse and the role of coronary artery disease in this condition has been inferred from the

absence of other obvious pathological conditions and the reported finding of "arteriosclerosis" of the sinoatrial node artery. On the other hand, we have found little evidence of disease of the sinoatrial node artery in eight patients dying with the sick sinus syndrome.¹ Furthermore, in our experience the incidence of a past history of cardiac infarction is no higher in patients with sinoatrial disease than in those with complete heart block. In the Devon heart block and bradycardia survey, up to 1972 11 (10%) out of 106 cases of chronic sinoatrial disease had a past history of myocardial infarction and 29 (13%) out of 222 patients with chronic complete heart block had suffered from a previous infarction. In the survey sinoatrial disease was defined as chronic sinus bradycardia (atrial rate below 50 min) associated with one or more of the following rhythm disturbances: tachyarrhythmias (atrial fibrillation, atrial flutter, paroxysmal atrial tachycardia, paroxysmal ventricular tachycardia), periods of sinus arrest or sinoatrial block in which cessation of atrial activity persists for two seconds or longer, or profound atrial slowing (below 40/min) with junctional rhythm.

Of the 43 patients fitted with pacemakers in Exeter for sinoatrial disease there have only been two instances of failure of inhibition and both turned out to be due to a faulty system. It is possible that the characteristics of the pacemakers in use are responsible for the difference between our findings and those of Radford and Julian² and of Dr. Sutton and his colleagues. The majority of our patients (37 out of 43) were fitted with Vitatron on-demand units, which specify inhibition to an R wave of approximately 1.5 mV at 70 Hz and 1 V at 30 Hz, whereas 15 of the 21 pacemakers used by Radford and Julian were Devices units, which, we understand, require a higher voltage for inhibition, particularly at the 70-Hz frequency. Dr. Sutton and his colleagues do not give information concerning their pacemakers.—We are, etc.,

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1 Evans, R. C., Brownlee, W. C., and Shaw, D. B., *British Heart Journal*, 1975, 37, 779.

2 Radford, D. J., and Julian, D. J., *British Medical Journal*, 1974, 3, 504.

Treatment of Clonorchiasis

SIR,—On the question of treatment of clonorchiasis Drs. J. P. R. Hartley and A. P. Douglas (6 September, p. 575) state that "treatment remains unsatisfactory" but make no mention of hexachloroparaxyol (HPX; chloxyle), a drug which has been used with success in China for over a decade.^{1,2} A few years ago, having been unable to obtain HPX from British or Continental sources, I was able to obtain a supply from Dr. Hatem in China, together with advice on dosage. Dr. Hatem recommended 30 mg/kg daily by mouth for 10 days or 30 mg/kg every alternate day for 10 doses and advised that the original dosage which I had quoted³ had since been shown to be unnecessarily high. Using this reduced dosage my colleagues at

this hospital have had excellent results and no significant side effects, and a report of this work is being prepared for publication. I understand that the question of manufacturing the drug for human use in Europe is under consideration by Hoechst Pharmaceuticals Ltd.—I am, etc.,

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- 1 Chung, H.-L., *et al.*, *Chinese Medical Journal*, 1965, **84**, 232.
- 2 Wang, S.-M., *et al.*, *Chinese Medical Journal*, 1965, **84**, 748.
- 3 Joplin, W. H., *Treatment of Tropical Diseases*. Bristol, Wright, 1968.

Local Renal Hypothermia

SIR,—With reference to Professor J. P. Blandy's letter (30 August, p. 542) concerning local renal hypothermia, having now used regional hypothermia in some 300 operations, mostly for the removal of cast calculi of the kidney, I really cannot agree that the need to use this technique occurs as infrequently as is suggested. We have found it particularly useful in providing good protection of renal function while permitting an unhurried operation on the kidney in a dry field.

Statistical analysis and pre- and post-operative clearance studies in our own series¹ and those of other workers² have shown excellent protection of renal function despite periods of ischaemia of up to 115 minutes. In contrast, reported studies on cases of calculi treated without hypothermic protection seldom detail the effect of the operation on renal function. A large proportion of the cases that we have dealt with have been second referrals following incomplete removal of stones by non-ischaemic techniques.

Methods of producing hypothermia such as those described by Marshall *et al.*³ have been used for some 20 years and are perhaps one of the reasons that regional hypothermia has not been more fully utilized. Precisely to improve on this situation we have developed our own method of achieving renal cooling over the past eight years.

I would encourage other surgeons to persevere with regional hypothermia using more recently developed techniques. Professor Blandy's 24 cases seems an insufficient number on which to make adequate judgement.—I am, etc.,

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- 1 Wickham, J. E. A., Coe, N., and Ward, J. P., *Journal of Urology*, 1974, **112**, 702.
- 2 Boyce, W. H., and Elkins, I. B., *Journal of Urology*, 1974, **111**, 307.
- 3 Marshall, V. R., and Blandy, J. P., *British Journal of Urology*, 1974, **46**, 253.

Private Practice in the N.H.S.

SIR,—If surgical private practice is to continue throughout Great Britain the private beds must remain in our hospitals as at present. Once they are "phased out" it would be only too easy to clamp down progressively on independent private facilities, as has been indicated in the recent consultative document (23 August, p. 497).

It is therefore our opinion that if we allow the pay-beds to go, then for ever after we shall have to fight a rearguard action, inevitably ending in retreat into full-time contracts with all that this implies (for ex-

ample, the recent freeze on pay increments due to anti-inflation action).

It has been shown^{1,2} that it is in the practical interests of the N.H.S. to keep the private sector geographically within the main hospitals where the consultants work. There is also considerable benefit from the extra money and incentive that private practice brings into the N.H.S. The only reason for removing pay-beds is political ideology, and we know where this will eventually lead.

We believe that in the interests of the N.H.S. we must keep the pay-beds as they are. When it comes to the crunch there may be no alternative to resignation or strike action, and in view of the nature of their work it could well be that the surgical specialties may have to take the lead.—We are, etc.,

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- 1 *Fourth Report from the Expenditure Committee* (Employment and Social Services Subcommittee). London, H.M.S.O., 1972.
- 2 *Private Practice in National Health Service Hospitals*. Cmd 5270. London, H.M.S.O., 1973.

SIR,—The present attack by the Department of Health and Social Security on private practice led me to perform a detailed analysis of my working time during the week 11-15 August 1975. My post is that of a general surgeon working away from the teaching centres in the south of England, and I suspect that comparable figures could be produced many times over by those in a similar position. None the less, I feel that statistics of this type need to be publicized simply to indicate the benefit at present obtained by the N.H.S. from its part-time consultants.

My working hours and minutes were recorded in detail by careful "clock-watching" from 0750 on the Monday until 1715 on the Friday. The week was probably above average in hours worked, by a small margin, but was by no means chosen as the busiest—indeed no choice was involved as I started the analysis on a typical Monday morning.

TABLE I—Hours Worked 11-15 August 1975

	N.H.S. h min	Private h min
Operating	16 40	3 05
Outpatient consultations ..	8 15	5 50
Ward rounds	7 30	5 50
Travelling	2 35	1 05
Administration and paperwork	1 35	4 30
Domiciliary calls	30	30
Clinical meeting	35	
Total	38 20	15 50

Grand Total = 54 hr 10 min.

Table I shows the hours and minutes worked under various headings. My total of about 38½ hours of N.H.S. work is seven hours more than my contracted time and this excess varies from 0 to 15 hours each week, mainly in relation to time spent on emergencies. The 16 hours spent on private work is much of it in the evenings and is probably an average figure.

Table II shows the item-of-service analysis. All the operations listed were performed personally and the classification into "major," "intermediate," and "minor" is that used by the British United Provident Asso-

TABLE II—Item-of-Service Analysis

	N.H.S.	Private
"Major" operations ..	9	1
"Intermediate" operations ..	4	3
"Minor" operations ..	3	1
New O.P. consultations ..	42	8
Old O.P. consultations ..	63	7
Ward consultations ..	57	9
House calls	1	1

ciation. (Table III illustrates this classification for those unfamiliar with it.) Table II indicates an N.H.S. work load which is five times that performed in private practice. This is borne out in operating terms by table III, which analyses the operations performed, and by reference to the time spent actually operating as shown in table I—more than five times longer spent in N.H.S. theatres than privately. The disparity in total working hours for the two systems (N.H.S.=2½ times private instead of 5) is attributable to the longer time per patient spent in private consultations and the somewhat longer time on paper work, telephoning, and administration, as shown in table I.

TABLE III—Operations Performed

Type	N.H.S.	Private
"Major"	Simple mastectomy Hemithyroidectomy Laparotomy; ileocolostomy Partial gastrectomy Retropubic prostatectomy Total gastrectomy Subtotal thyroidectomy Retropubic prostatectomy Right hemicolectomy	Cholecystectomy
"Intermediate"	Resuture burst abdomen Hernia repair Exploration of sinus "Cutback" for covered anus	Hernia repair Excision of hydrocele Hernia repair
"Minor"	Manual dilatation for haemorrhoids Cystoscopy Manual dilatation for fissure	Manual dilatation for haemorrhoids

I suppose that I would be considered indiscreet to indicate the exact sums involved in remuneration; suffice it to say that I am maximum part-time on the fourth incremental point (and apparently staying there!) and that my private income for the week in question was just in excess of three times my N.H.S. income. This figure, coupled with the five times greater work load for the N.H.S., gives a 15 times difference in remuneration. This seems to me like "good value for money" for the N.H.S., and the present attempt to destroy the system, if successful, can lead only to a sharp increase in emigration and a gross deterioration in the service.—I am, etc.,

JAMES GROGONO

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SIR,—Mr. R. S. Murley (6 September, p. 596) writes with his usual rational lucidity on this very important subject. However, he misses the most important and dangerous portent. The profession is not only threatened by a separation between the N.H.S. and private sectors and a starvation of private beds. I see the day not very far away when it will become illegal to practise private medicine of any kind and by any practitioner within the United Kingdom.

Surely now is the time for the profession