force" are unlikely to be bettered in the foreseeable future by modern pharmacological and surgical substitutes.

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¹ Holmes, T W, and Rahe, R H, *Journal of Psychosomatic Research*, 1967, **11**, 213.

² Mendels, J, and Weinstein, N, *Psychosomatic Medicine*, 1972, **34**, 527.

³ Ransley, C, and Nixon, P G F, unpublished data.

⁴ Nixon, P G F, *Practitioner*. In press.

⁵ Kennedy, A, *Lancet*, 1957, **2**, 261.

⁶ Kagan, A R, and Levi, S, *Social Science and Medicine*, 1974, **8**, 225.

⁷ Nixon, P G F, et al, *British Journal of Sports Medicine*, 1976, **10**, 54.

⁸ Mackenzie, J, *Diseases of the Heart and Aorta*. London, Oxford Medical Publications, 1908.

Prophylactic use of bronchodilators

SIR,—In your leading article "Bronchodilators, new and old" (14 August, p 387) you did not mention the prophylactic use of these drugs. When wheezing is produced by exercise or when nocturnal wheezing is a prominent clinical feature two puffs of a portable pressurised aerosol containing a long-acting β_2 -adrenoceptor stimulant such as salbutamol or terbutaline before exercising or going to bed at night frequently prevents wheezing occurring, and many young asthmatics who follow this advice can play games which would be impossible without such treatment beforehand.

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Mid-trimester termination

SIR,—With reference to your leading article on this subject (5 June, p 1357) we would like to report our series of mid-trimester abortions using a combination of intra-amniotic hypertonic urea and prostaglandin E_2 .

A series of 58 patients was analysed in 1973-4 at the North Middlesex Hospital, where the technique has since been adopted as the routine for second trimester abortion. Fifty-six of the patients were seeking mid-trimester abortions; one was a diabetic with an intrauterine death at 30 weeks and the last a patient who had suffered eclampsia at 21 weeks. Ureaphil (lyophilised urea powder) 80 g in 120 ml of physiological saline was employed, followed by 5 mg of prostaglandin E_2 , each drug being injected separately into the amniotic cavity after the extraction of as much liquor as possible. The continuing pregnancies varied in gestation from 14 to 22 weeks and the average induction interval was 11½ hours. There was no significant difference between nulliparous and multiparous patients. In one patient the method failed; the pregnancy was of some 15 weeks' gestation and the amniotic sac could not be identified; she was subsequently aborted successfully vaginally.

We did not encounter any complications due to the alleged increase in blood concentration of fibrin degradation products or a fall in fibrinogen level and platelet count. We did, however, observe two severe reactions to prostaglandin, with hypotension, bradycardia, shivering, and dyspnoea; one patient ruptured her uterus and in retrospect was probably unsuitable for the technique since she was a

grand multipara who had delivered five babies vaginally. The only other complication was an episode of haemoglobinuria in a patient who appears to have suffered an accidental intravenous injection of hypertonic urea. The urine of this patient contained 4 g of haemoglobin per litre. An intravenous infusion of dextrose produced a good diuresis and the urine was cleared of haemoglobin. The patient failed to abort after 24 hours and an oxytocin infusion was started, after which the cervix dilated and a dead fetus was delivered after 12 hours. There was no incidence of severe haemorrhage. Prophylactic antibiotics in the form of co-trimoxazole were administered for five days. Fourteen patients required evacuation of retained products of conception and a further two were readmitted for persistent vaginal bleeding, but in only one of these cases were chorionic villi retrieved. One patient was readmitted for pelvic infection in spite of prophylactic antibiotics.

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S KHUNDA

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Effects of beta-blocking drugs on insulin-induced hypoglycaemia

SIR,—The report by Dr R J Newman (21 August, p 447) that acebutalol did not impair blood glucose recovery following insulin-induced hypoglycaemia complements the report by myself and Dr D Barnett (31 July, p 272) that atenolol did not impair blood glucose recovery under similar conditions. The cardioselective or β_1 -adrenergic blocking drugs thus offer a new therapeutic approach to the treatment of angina pectoris and hypertension in diabetic subjects since they would seem to be free of hypoglycaemic side effects.

The recovery of the blood glucose level from hypoglycaemia is dependent on several mechanisms, including hepatic glycogenolysis, lactate feedback from muscles to liver for gluconeogenesis, and decreased peripheral glucose uptake. The major mechanism involved is hepatic glycogenolysis and these results suggest that the adrenergic receptors mediating hepatic glycogenolysis are of the β_2 type. This hypothesis is further supported by the observation of Dr A G Leitch and others (14 February, p 365) that intravenous infusion of salbutamol, a β_2 stimulant, produced a rise in plasma glucose levels. The report by Dr Newman that metoprolol did delay the return to normoglycaemia and that it was not significantly different from propranolol is unexpected. The β_1 -blockers share the ability to antagonise the effects of catecholamines on the heart but differ in their effects on other tissues. Although Dr C Davidson and his colleagues (3 July, p 7) have shown that the antihypertensive activity of β -adrenergic antagonists is not significantly influenced by their ancillary pharmacological properties, these might be responsible for the differences

seen in the blood glucose recovery rates. The important ancillary properties of these β -blockers are shown in the table below.

There is no correlation between these ancillary pharmacological properties and the rate of blood glucose recovery from hypoglycaemia. The simple conclusion is that some β_1 -blockers are more specific than others. Atenolol and acebutalol are claimed to be highly specific β_1 -blockers and they would seem to have advantages over other β -blockers for use in subjects prone to hypoglycaemia.

S P DEACON

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Hypertension as a problem of public health

SIR,—Currently the investigation and treatment of hypertension usually depends on the patient's consultation of his doctor for related or unrelated symptoms. Since hypertension is common and treatable and since it is often symptomless perhaps a public health approach to the problem would be best. As a pilot study a sharply demarcated population such as that of the Isle of Wight could be subjected to a full screening procedure and by experiment the best strategy for the investigation and treatment could be established. There is little doubt that the magnitude and importance of the problem of hypertension is such that it cannot be adequately dealt with within the current framework of medical practice.

D B JAMES

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Treatment of blood/injury/illness phobia

SIR,—Most people know of someone who faints at the sight of blood. Many doctors may remember medical students in their own set—even themselves—who did so on the first day in the operating theatre or in casualty. It seems, then, not an uncommon part of the human repertory but one that may be outgrown—or treated. Our inquiries from veterinary surgeons suggest that it is peculiarly human. If injecting or operating on an animal they do not worry about bradycardic syncope in the animal—only in the watching human.

Some people are so afraid of blood, tissue injury, injections, and venepuncture that they refuse necessary medical and surgical procedures. In marked contrast to other phobias, who become tachycardic in the presence of the phobic stimuli and rarely faint, blood/injury/injection phobics after initial tachycardia become profoundly bradycardic and faint—a very effective avoidance mechanism.¹ Experience has shown, however, that they can be successfully treated using a behavioural approach^{2,3}—for example, by exposing them to the phobic stimuli in a graded way, perhaps while they are tilted slightly head-down to prevent the fainting.

We are particularly interested in treating

Beta-blocking agent	Cardioselectivity	Intrinsic sympathomimetic activity	Membrane stabilising activity	Blood glucose recovery from hypoglycaemia
Atenolol	+	—	—	No delay
Acebutalol	+	+	+	No delay
Metoprolol	+	—	—	Delayed
Propranolol	—	—	+	Delayed

this group of patients, especially if they are avoiding necessary blood tests, injections, or operation and want to overcome their fears. Treatment is often completed successfully and rapidly and if doctors know of such patients who want treatment their referral to us at the Institute of Psychiatry would be welcomed.

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¹ Connolly, J, Hallam, R S, and Marks, I M, *Behaviour Therapy*, 1976, 7, 8.

² Marks, I M, et al, *Behavioural Psychotherapy for Neurosis: An Advanced Clinical Role for Nurses*. London, Royal College of Nursing, 1976.

³ Lloyd, G G, and Deakin, H G, *British Medical Journal*, 1975, 4, 440.

Distribution of new distinction awards

SIR,—With reference to table 1 (14 August, p 437), the totals under columns A B and C are incorrect. This appears to be due to the omission of figures opposite the specialty of venereology. For those of us seeking recruits to this specialty and who are trying to maintain the morale of its younger consultants this omission can only be seen as a tragedy. I trust your apology and the space you give to a correction will be generous.

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* * *The table was printed as it was supplied to us by the DHSS and was published in good faith. The Department now acknowledges that there was an error in the table: the column totals are correct but the last three lines above the totals should read:

Specialty	Category of award			
	A +	A	B	C
Rheumatology and rehabilitation ..		1	2	7
Thoracic surgery ..			5	4
Venereology ..				3

We doubt whether Dr Morton will be able to derive much comfort from the number of awards given to venereologists.—ED, *BMJ*.

Bureaucratic cancer

SIR,—Mr J McE Potter (21 August, p 479) is not alone in deploring the periodic sanctimonious sermons of Sir George Godber (31 July, p 303). As a relatively recently retired Civil Servant who must carry some measure of responsibility for the growing ills of the NHS, Sir George is all too ready to level snide criticisms at the medical profession and particularly at the BMA. And who is he to complain of the "union-style activities of the BMA" when the same disease afflicts his former Civil Service colleagues? I am sure that the majority of doctors regard these trends as deplorable, but are they not inevitable in the context of a growing State monopoly in medicine and so many other fields?

Many, I suspect, would profoundly disagree with Sir George when he says that "the NHS . . . is still an asset." The high traditions and standards of British medicine have certainly proved an invaluable asset to the British public during the tempestuous 28 years of

State control. But the growingly centralised, bureaucratically dominated, and politically perverted NHS is now an incubus rather than an asset. Sir George refers to the "duty and self-interest" of the profession; but these, no less than the vital interests of the community, lie in the promotion of a reformed system of medical care which will encourage personal responsibility as well as a more efficient and economical use of our national wealth and personal resources.

The record of Government in management of the economy, and especially that of the State monopolies, is utterly disastrous. It is time for the nation to realise that the money it gets from Whitehall is the money it sends to Whitehall, minus freight charges both ways, plus the attachment of many less acceptable strings. The essential buffering of medicine from politics will be achieved only by the creation of supplementary and alternative methods of financing medical care and by the promotion of a strong and viable independent sector.

REGINALD S MURLEY

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SIR,—Mr J McE Potter (21 August, p 479) discusses Sir George Godber's current contribution to the NHS. Those who worked with Sir George in the first 25 years of the Health Service learnt to take his rough with his smooth. It was his idealism and enthusiasm which encouraged those who had to make the system work and helped them to overcome the problems raised by well-intentioned but nevertheless powerful and persistent critics.

There is no doubt that the care of the acutely ill has improved beyond measure with the institution of the NHS and it continues to improve as science increases its contribution. The underlying lack of resources began to show when the same standard was required for the more indeterminate and long-term illnesses and where medical and scientific advances progress more slowly.

The answer to this demand meant spreading the load more equally between the three branches of the service and required a wider administrative framework. That this is producing problems in its turn points once more to the underlying weakness that sufficient persons and resources to provide superlative care, cradle to grave, are not available.

The younger generation of doctors, with their wider background, know this. It requires a fresh viewpoint to educate every one to use the NHS as it would a scarce and valuable commodity and to devise parallel services to take over where medicine can carry its skills no further.

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Consultants and the incomes policy

SIR,—The phrase "a sacrifice to be made in the wider interests of defeating inflation" (21 August, p 488) must have a nauseating flavour for younger consultants who have now been sacrificing continuously since they entered medical school 15-20 years ago.

From the early pittance, endless hours, and continual insecurity with change of job and salary, via the expense and uncertainty of higher qualification, to the final goal of a per-

manent appointment somewhere in Britain we all sacrificed like hell. Now, for those who meanwhile rode the crest of the wave in the days of consumer boom, we are told our salaries are to be cut by 8-9% by loss of increment and, make no mistake, this is a cut in the contract rate for the job, not a salary rise. Some are fortunate to have escaped this obligatory sacrifice and will receive increments according to contract, thus inverting salary status with sacrificial victims a year senior, not just for a year but right up the scale.

No, this is nonsense, and so is the unctuous placebo about "wider interests of defeating inflation." Forgo a salary rise—yes; accept a salary cut—no.

The BMA despairs over lack of unanimity among us, but surely the system has not selected a bunch of invertebrates frightened to act against exploitation. As a group divided, we shall fall. The issue is resignation pending the formulation of a fair and open contract, not one left over from the slave trade.

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Action by consultants

SIR,—Although most doctors in private conversation will freely admit that the terms and conditions of service are wholly unacceptable and should not be tolerated a day longer than necessary, it does seem that consultants lack the resolve to sink their differences and to bring effective pressure to bear upon the Department of Health.

This is doubly tragic because, in addition to the increasing wasting of established consultants, those of us who are clinical tutors are reminded daily of the inconsistencies between the excellent quality and quantity of applicants for junior hospital posts leading to vocational training for general practice on the one hand and the rapidly declining quality of candidates for posts aimed at specialist training on the other. It seems to me that unless something can be done to make specialist medicine more attractive within the next year or two irreparable damage will have been done to specialist practice in Britain. I think that the profession ought to regard this problem as the most serious problem facing both doctors and, indeed, the NHS at this time. Certainly, although I am extremely irritated by the terms and conditions of my own service, it is the prospect of what might happen to the standing of consultants in the next 15 years which really drives me to despair.

I wonder if I might suggest one manoeuvre which would certainly embarrass the DHSS and bring closer the time when circumstances will force them to set aside political considerations and take a realistic look at their specialist service; at the same time being, I believe, ethically acceptable to all consultants. If we really believe that a consultant appointment is an unsatisfactory thing to possess could we not agree to withdraw from all appointment committees for consultants until the terms and conditions of service are such that we could with a clear conscience recommend our juniors to aspire to consultant posts?

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