The second patient, a hypertensive man of 33, had suffered a myocardial infarct at the age of 31. A permanent internal pacemaker with a fixed rate of 70 impulses/min was inserted a year later because of permanent complete heart block. Subsequently he was readmitted following episodes of ventricular tachycardia and fibrillation and within a period of eight hours required 21 defibrillations. In spite of full drug therapy the episodes were occurring with increasing frequency until the catheter wire was exposed and connected to an external pacemaker box so that the impulses could be increased to 110/min. The only episode of ventricular arrhythmia which occurred from then on was when one of the connexions became loose, and this was quickly rectified. Full recovery has occurred and the rate of the pacemaker has now been cut down to 70/min as he continues with complete heart block.

This form of therapy should seriously be considered whenever these dangerous arrhythmias do not respond to drug administration.—I am, etc.,

M. E. BENAIM

Royal Victorian Infirmary,
Newcastle upon Tyne

Persisters

SIR,—In your leading article (13 January, p. 63) on "Infectious Disease" you refer to the discovery of the persister state by virtue of which bacteria become phenotypically resistant to certain antimicrobials, notably penicillin. The reference given was to a paper by Crofton published in 1969.¹ For the sake of historical accuracy I wish to point out that persisters were first described by the late Professor J. W. Bigger in a paper entitled "Treatment of Staphylococcal Infections with Penicillin" published in 1944.² Bigger says, "Despite the well-marked bactericidal power of penicillin, attempts to sterilize broth containing *Staphylococcus pyogenes* often fail because, among the millions of cocci present, there are a few which are insensitive to penicillin. These I call 'persisters' . . . Persisters are believed to be insensitive to penicillin because they are in a dormant, non-dividing phase . . ."

This paper of Bigger's, in which he also presents conclusive evidence that the action of penicillin is a bactericidal one, is a minor classic. So much so that, having gone back to it again after having read your leader, I have recommended it, and will continue to recommend it, to students as a model of research procedure and presentation.—I am, etc.,

F. S. STEWART

Department of Bacteriology,
Trinity College,
Dublin

¹ Crofton, J., *British Medical Journal*, 1969, 2, 209.
² Bigger, J. W., *Lancet*, 1944, 2, 497.

Safety-belt Snag

SIR,—I was interested in the case reported by Dr. S. S. Sanders (13 January, p. 114) because I am at present treating an active 65-year-old man who sustained severe comminuted fractures of both bones of his right leg in a similar fashion—catching his rear foot in a loose-hanging safety belt while getting out of a car.

Obviously this serious hazard should be given greater publicity, and perhaps the owners of cars without spring-loaded seat belts would thereby be encouraged to hang up the belts when not in use. It must be in

the interests of insurers and insured to see that something is done about this.—I am, etc.,

C. J. MCCORMACK

Portlaoise, Ireland

SIR,—I wholly endorse the views expressed by Dr. S. S. Sanders on car safety belts (13 January, p. 114). I recently treated an old lady who had suffered a fractured neck of a femur after tripping over a safety belt which hung out of her car. The commonly seen belts are either too short to be quickly fitted when safely stowed away or too long to be safely stowed away when set at the correct length for use, and I agree that spring-loaded belts should supercede the usual fittings found in the majority of vehicles.—I am, etc.,

M. R. WARREN

Milnthorpe,
Westmorland

SIR,—I read with interest the letter from Dr. S. S. Sanders (13 January, p. 114) regarding the dangers of car safety belts. While I agree with him that these straps should be worn, as they prevent injury, there is no doubt they have also caused a number of serious accidents. My wife recently broke her ankle by catching her foot in such straps, which were lying on the floor, as she was leaving a car. This stimulated my interest in the subject, and since then several examples of this have come to my notice. They range from broken hips to sprained ankles. Such accidents might be expected to be caused only by loose straps and not by the variety that are supposed to retract automatically. Unfortunately, this is not so, as some straps which are meant to retract automatically do not do so. The safety straps used by service pilots retracted on a wire cable activated by a strong spring, but it appears that car seat belts will sometimes not retract automatically as the spring controlling the inertia reel is not strong enough.

I shall be glad to receive details of accidents caused by supposedly self-retracting safety straps, as there appears to be a strong case for modifying their design.—I am, etc.,

NEIL S. PAINTER

Manor House Hospital,
London N.W.11

Case for Free Contraceptives

SIR,—No one wants unwanted pregnancies. On this all agree, but you make two assumptions in your leading article (20 January, p. 130) which we would challenge.

The first assumption, implied in your article, is that the first cause of unwanted pregnancy is the omission of contraception rather than the commission of the irresponsible and selfish act(s) of sexual intercourse.

The second assumption is that doctors will be willing to prescribe contraceptives to all comers, married and unmarried, and that we can do nothing to mitigate the permissive society our patients, especially the young, have to live in. These two facets are related because our prescribing will be read as, at least, failure to show disapproval of the sexual licence undermining marriage and the family.

Universal, "free" contraception may reduce the incidence of abortion operations three months later and of unwanted babies nine months later, but irregular sexual activity will produce inexorably, as all doctors see daily, a harvest of broken hearts, broken homes, and homeless or one-parent children—not to mention venereal disease. This is not theorizing about morals but an immediate practical issue. It is most regrettable that you, speaking for doctors as a whole, simply accept that irresponsible, permissive behaviour will go unchecked.—We are, etc.,

JEAN R. C. BURTON-BROWN
S. HAMILL
T. D. SAYER
N. H. TUCKER
G. J. FIELD

J. LOVELESS
ELEANOR A. THOMPSON
J. K. N. YEARSLEY

Margate

Broadstairs

Ramsgate

J. D. BEALE
R. STOWE
D. A. J. NEDEN

Controlling Inflation

SIR,—I was disgusted by your unpatriotic leading article "Controlling Inflation—Second Stage" (27 January, p. 1971). What does it matter how much consultants get paid so long as this country is saved from inflation?—I am, etc.,

E. M. WRIGHT

Coombe Bissett,
Salisbury, Wilts

Serum Lithium Estimations

SIR,—The paper by Dr. B. von Hartitzsch and others on permanent neurological sequelae despite haemodialysis for lithium intoxication (30 December, p. 757) brings a reminder of the dangers of the valuable drug lithium carbonate. In this connexion I should like to raise a disquieting matter: the inaccuracy of serum lithium estimations.

Here are three examples from my recent experience. A perceptive patient of mine noticed that the results were higher when he went to his family doctor's pathologist than when he went to mine, so he visited both on the same day. The first pathologist reported a serum lithium of 0.6 mEq/l. and the second pathologist on a sample taken 10 minutes later reported a level of 1.0 mEq/l. Another patient of mine, a conscientious fellow who could be relied upon to take his 1,200 mg of lithium carbonate per day if anybody could, was coasting away over the months at a serum lithium level of between 0.4 and 0.6 mEq/l. when suddenly, according to the teaching hospital which does the estimations, a level of 2.0 mEq/l. was reached. He was without any side effect when I saw him next a fortnight later, never had had any, and was still taking his 1,200 mg daily. This time I tried my first patient's trick and asked another teaching hospital to make a simultaneous estimation. The results were 0.2 and 0.46 mEq/l. respectively. At another hospital I started an inpatient on 1,600 mg of lithium carbonate per day. On the sixth day, as she began to show side effects the drug was withdrawn for a few days but recommenced at 800 mg per day.

After nine days on this dose a test was made and the result was "serum lithium: nil detected."—I am, etc.,

J. G. WEIR

London W.1

Compensation for Personal Injury

SIR,—Many orthopaedic surgeons will welcome the Government's decision to set up a Royal Commission on compensation for personal injury (*B.M.J.*, 30 December, p. 802) and will hope for a modification of the present legal arrangements, which so often serve to prevent or delay a patient's recovery. Now once an injured person believes he is suffering as a result of someone else's negligence and that he is accordingly entitled to hope for financial compensation a severe blow is struck at his will to recover. Without such a will the efforts of his medical and other advisers are largely stultified and considerable exaggeration and prolongation of the disability often follow. I am not writing of deliberate malingering for financial gain, which is relatively uncommon and usually easily recognized when attempted, but of a subconscious compensation neurosis which all too readily develops in the months following an injury, often in patients who have shown great courage and determination in the early stages of their treatment. Such a man becomes a neurotic burden to himself and to all concerned with his welfare, a situation which often seems directly attributable to the delays and uncertainties of the present legal procedures.

The principle of compensation for the effects of another's negligence is a fair one, but its implementation needs drastic revision. Entitlement to compensation, if not automatic, needs to be decided at a very early stage so that the patient is relieved of the anxiety brought on by uncertainty. The extent of the special damages attributable to his injury similarly needs prompt recommendation, possibly based on a tariff and administered by a special branch of the judicial system. If the special damages were payable promptly, but only on the completion of medical treatment they would form a positive inducement to recovery instead of a golden millstone around the neck of the unfortunate beneficiary.—I am, etc.,

A. J. HARROLD

London W.1

Cutaneous Sarcoidosis in Venepuncture Sites

SIR,—In the interesting cases of sarcoidosis collected by Dr. B. W. Hancock (23 December, p. 706) some of the granulomas developed where venepuncture had been performed for blood donation. Might not an intracutaneous injection of saline (or of the patient's blood) therefore be as effective in diagnosing early sarcoidosis as an injection of Kveim homogenate? Erythema nodosum is often visible and painful evidence of subcutaneous sarcoid granulomas. The skin lesions are distributed dependently in the legs, and rarely also in the forearms. The hydrostatic pressure may locally damage the overlying skin so that it is temporarily vulnerable to minimal trauma. The subcutaneous granulomas themselves, however, are painless. In a similar sort of way beryllium dust may perhaps have an adjuvant effect,

so that otherwise silent cases of sarcoidosis are sometimes unmasked. It is probably significant that in some industrial cases of chronic berylliosis the patient simply lived in the vicinity of the factory but never worked there at all.—I am, etc.,

GERALD MACGREGOR

Chilworth, Surrey

Severe Hyponatraemia in Hyperlipaemic Diabetic Ketosis

SIR,—In their interesting case report (23 December, p. 709) Dr. J. A. Bell and others point out the drawback of assessing plasma water concentration by the technique of evaporation to dryness in hyperlipaemic diabetic ketosis.

The plasma water content may be more readily obtained by measurement of plasma osmolality and then repeating the measurement after dilution of plasma by an equal volume of unionized water. Then plasma water (%) = $\frac{\text{osmolality of dilute plasma} \times 100}{(\text{plasma osmolality} - \text{osmolality of dilute plasma})}$.

Electrolyte concentrations in the water phase may then be easily calculated.—I am, etc.,

J. M. RAWLES

Department of Medicine,
University of Aberdeen

Skin Reaction to Isopropyl Alcohol

SIR,—Recently a patient was admitted for radiotherapy who had a bad eczematous reaction in the skin of both cubital fossae which had been ascribed to Elastoplast allergy. She had developed a deep venous thrombosis postoperatively and had been treated with a drip infusion of heparin. Elastoplast had subsequently been placed on her arms.

After admission blood was taken for prothrombin time estimation and a similar eczematous reaction developed on the back of the hand at the site of venepuncture. This could not have been due to Elastoplast, as this had not been used, but it was noticed that the fingers which had held a Medi-swab (saturated with 70% isopropyl alcohol) on the puncture site were also eczematous. A crude but effective skin testing system was set up and pieces of Elastoplast, cotton-wool, a Medi-swab, a Medi-swab whose isopropyl alcohol had been allowed to evaporate, and a needle were all applied to the skin. The area under the Medi-swab became very red and itchy while the other areas were unaffected.

This suggests that some people can be allergic to simple substances like isopropyl alcohol. This is now almost universally used to clean skin before venepuncture and this type of reaction may be quite common. It is also possible that some cases of "Elastoplast allergy" are in fact due to some other, simpler, substances like isopropyl alcohol.—I am, etc.,

ANGUS MCINNES

Western General Hospital,
Edinburgh

Drugs in Infertility

SIR,—Your expert's recent "Today's Drugs" article (21 October, p. 167) and subsequent letters from Dr. G. I. M. Swyer (18 November, p. 425) and Professor I. D. Cooke (30

December, p. 794) were interesting, and call for a small added comment.

It is all too common to find that the male partner in a subfertile marriage has been overlooked until his wife has had considerable preliminary investigation. In the Bristol male subfertility clinics investigation of approximately 300 men a year rarely reveals a fully fertile husband. Clomiphene may well be the only drug yet available with a possibility of stimulating spermatogenesis, but it is extremely difficult to prove—or refute—its efficacy and correct dose, and its applications may not yet be determined.¹ I fully agree with Dr. Swyer and Professor Cooke that mesterolone is a disappointingly weak androgen, which possibly accounts for its claimed lack of inhibition of gonadotrophin. It is difficult to understand how it can possibly stimulate spermatogenesis in males already producing adequate endogenous testosterone, and in order to produce normal levels of testosterone in hypogonadal males, sufficient to result in penile development it is necessary to give 200 mg daily for one to two years, and such patients are likely to be subfertile anyway.

Undoubtedly clomiphene has been a major factor in the successful treatment of anovulation, and Dr. Swyer's statement that ovulation occurs 8-12 days after a course has been substantiated by our experience of successful pregnancy on four occasions after therapeutic donor insemination; 200 mg clomiphene had been given daily for five days and insemination was carried out seven days later, on day 16 of the cycle.—I am, etc.,

G. L. FOSS

United Bristol Hospital

¹ Foss, G. L., Tindall, V. R., and Birkett, J. P., *Journal of Reproduction and Fertility*, 1973, 32, 167.

Psychiatric Day Care

SIR,—The article by Dr. D. H. Gath and others (13 January, p. 94) is indeed timely (though I suspect too late) in pointing out, *inter alia*, that a large proportion of day hospital patients have long-term needs which might be difficult to meet in the district general hospital units. Their findings support the view that a large proportion of the total psychiatric day population is made up of patients with chronic disorders of poor prognosis who maintain a high rate of daily attendance over a long period of time and have become long-term day patients as a direct result of the closure of mental hospital beds. With the rundown and eventual closure of these hospitals it is certain that the numbers of such patients in the community will multiply.

The hospital in which I work is located within an industrial county borough area and it serves a population of 330,000 persons. It has its own outpatient department and has recently been provided with a custom-built day unit to which is attached an industrial therapy unit. There are 30 beds in a detached unit intended for short-stay patients and another 60 intended for short/medium-stay disturbed patients within the traditional mental hospital itself. There are, of course, long-stay and psychogeriatric wards as well. In fact, under various pressure all these short/medium-stay beds tend to be used for the admission and readmission of patients with all types of psychiatric disorder regardless of age and