Training Anaesthetists

SIR,—I should like to add the following comments to those already expressed in your leading article on training of anaesthetists (22 January, p. 194) and in the correspondence that followed (5 February, p. 372).

Clearly the authors of *Proposals for the Future Training of Anaesthetists*¹ and of *Higher Specialist Training for Anaesthetists*² have not felt it within their terms of reference to discuss the related problems of manpower and recruitment. However, the recommendations that anaesthetists should as part of their training obtain experience in medical posts such as general practice or general medicine indicates that these plans are likely to prove expensive in terms of manpower. I would suggest that unless the traditional structure of anesthetic staffing in hospitals is considerably modified the proposed schemes will have to be restricted to centres where resources are relatively plentiful and that, despite the declared intention to implement training schemes flexibly, a proliferation of section 38 non-teaching service posts is inevitable.

An even distribution of staffing allied to training schemes could be achieved if junior doctors from certain specialties were encouraged to undergo a preliminary one year's training in anaesthetics by ensuring that such a course seemed relevant to their future career. A body of partially-trained but certificated anaesthetic personnel would thus be created who could provide a supplementary anaesthetic service in such spheres as anaesthesia for E.C.T., extradural analgesia in obstetrics, minor accident surgery, and dentistry and resuscitation in coronary care, intensive therapy, and neonatal emergencies. The specialties who seconded their staff for this training would then become self-sufficient for a proportion of their anaesthetic requirements. The first and second year of general professional training would seem suitable for accommodating this scheme.

If the above course was followed not only would adequate and predictable staffing of junior anaesthetic posts become possible but anaesthetic consultants would find greater satisfaction in their work as their duties embraced the teaching and consultative work implicit in such changes.—I am, etc.,

C. J. R. ELLIOTT

Welwyn Garden City,
Herts

¹ Faculty of Anaesthetists of the Royal College of Surgeons of England, *Proposals for the Future Training of Anaesthetists*. London, Revised 1972.

² Joint Committee for Higher Training of Anaesthetists at the Royal College of Surgeons of England, *Higher Specialist Training*. London, 1972.

Medical Advice on Contraception

SIR,—It is often implied in the press, sometimes even in the medical press, that any sort of restraint in prescribing "the pill" is always the result of religious or moral prejudice. It is refreshing, therefore, to read Dr. Violet Anderson's "Personal View" (26 August, p. 524).

Advice on true "family" planning—that is, on the spacing and limitation of children in the family—is relatively simple. But, to advise those who seek coital experience without its normal biological consequences out-

side any concept of family is more difficult. As Dr. Anderson says, a girl of 16 or 17 may have to subject herself to six or seven years of physiological manipulation. Her chances of being involved in emotionally disturbing and biologically frustrated relationships must be increased—and this before her "family planning" even begins.

It has been said that a woman's sexual experience is not complete until her child is weaned, while the long-term effects on the individual, let alone those on the community, cannot yet be predicted. To describe all this as "natural behaviour" is clearly false. In short, the unwanted pregnancy is not the only problem on which advice and education is needed.

My experience in general practice is that engaged and married couples earnestly seek and are grateful for advice. Some of the others, however, just want a prescription for the pill, have already determined their attitudes, and are not really interested in advice. They are also ignorant of basic biology, let alone their own physiology. With the environment putting so much stress on sexual arousal they are confused about means and ends.

Of course it is right that doctors should not primarily be concerned to approve or to disapprove, and that advice should be freely available. It usually is in general practice. And while advice is not always heeded any suggestion that all girls are morons, incapable of education, and in urgent need of birth control protection must be refuted. I support Dr. Anderson in believing that the medical profession must resist all pressures to prescribe without education, explanation, and advice.—I am, etc.,

E. O. EVANS

Stratford-upon-Avon

SIR,—Sex is for delight. Yes, but how delightful is sex outside the context of a loving relationship? How delightful is it to give oneself sexually without giving oneself in a much deeper sense? If sex is indulged at a superficial level can it become mechanical and debased? Has anybody done any studies?

Mr. Keith Norcross (9 September, p. 640) is compassionate about the impotent middle-aged man, but unfortunately shows no such compassion towards the wife who has "failed" and is to be replaced by the sex-therapist.—I am, etc.,

DEREK PHILLIPS

Huddersfield

SIR,—I feel compelled to protest at the inclusion of the "Personal View" article by Mr. Keith Norcross (9 September, p. 640). The content of "Personal View" is, usually, an informative and often entertaining comment on the less clinical aspects of medical practice. Mr. Norcross, with his advocacy of fornication, adultery, and sex-therapists, takes us beyond the fringe of generally accepted medical ethics into a world of licence with no definable code of sexual conduct. Surely the therapies suggested can be seen historically to have led to the general moral breakdown of societies if not nations.

If the author of this article were to return to the source material of true Christian

sexual morality, as found in the *New Testament*, he would find to his dismay that Christ was not, in fact, a protagonist of "dishonesty, frustration, waste, guilt, misery, cruelty, blasphemy, and moral inversion."

Having qualified in 1968, I do not consider myself old but do feel that dissemination of such ideas as are expressed in this recent article would, when taken to their logical conclusion, tend to lead to depravity.—I am, etc.,

D. R. AYLIN

Sutton Coldfield,
Warwick

SIR,—I do not believe that personal views on morality should influence our practice of medicine. Dr. L. H. Cane's letter (9 September, p. 647) suggests that he would not agree. Because there are medical factors involved in taking the contraceptive pill it is necessary for doctors to prescribe it. We were not, however, required to prescribe the pill in order to decide who should or should not take it on moral grounds.

I believe it is wrong for us to consider factors other than medical ones. That there may be moral issues also, I accept. The moral issues, however, should be discussed and decided outside the surgery by the individual concerned. It is an abuse of our professional position to attempt to impose our personal views on a captive audience.—I am, etc.,

J. A. LUNN

Northwick Park Hospital,
Harrow

Abdominal Distension

SIR,—On two occasions recently we have been concerned about persistent or recurrent intestinal distension after laparotomy and uncontrolled by conservative measures. Both patients were thought incapable of tolerating further surgery. It was therefore decided to adopt a veterinary procedure used for "blown" sheep and attempt percutaneous decompression using a trocar and cannula to insert a soft plastic tube.

In one case immediate and in the other slower but steady relief was obtained and recovery followed in both, the tube being removed after a few days. I have been unable to find a reference to this procedure in the human patient, doubtless owing to the inadequacy of the search, and I would be interested to hear of the experience of others.—I am, etc.,

G. A. D. LAVY

Pembury Hospital,
Pembury, Kent

Mechanics of Elastic Bandaging

SIR,—When an elastic bandage is applied to a leg for varicose veins or ulcer the object may be to empty the superficial veins of blood, but surely it would not be wished to interfere with the arterial supply or the microcirculation. I would suggest, therefore, that the pressure applied should not on any account exceed the pressure at the venous ends of capillaries. This varies, of course, from vessel to vessel and from time to time, and much more according to whether the patient is upright or recumbent. While not fearing that excessive compression is often applied to the legs of ambulant patients, I

would urge that not more than at the most a pressure of 10 mm Hg should ever be allowed at night.

To calculate the pressure being exerted on a leg at any particular bandage tension Laplace's formula for tubes would be used: $P=T/R$, where P is the pressure in dynes/cm², T is the tension in dynes/cm, and R is the radius of curvature in cm of the surface being bandaged. At an ankle of radius 4 cm a pressure of 10 mm Hg would correspond to a tension of 54 g/cm. Allowing for the usual 50% overlap this would amount to 408 g on a 15-cm bandage (14 oz on a 6-in bandage). Even moderate stretching of the elastic of an adhesive bandage intended to be left on at night can greatly exceed this figure.

No wonder such bandages are apt to become so painful at night that patients learn to get up to relieve the pain and that ulcers occasionally appear beneath them. Both the pain and the ulcers are surely ischaemic.

It is usually recommended that the tension should get less as elastic bandaging proceeds up the leg. But for any given tension the pressure resulting is inversely proportional to the radius of curvature. In a standing subject venous pressure at the groin is about half what it is at the ankle, but the radius of curvature in the thigh is often more like three times as great as at the ankle. The advice is therefore unnecessary.—I am, etc.,

H. DAINTREE JOHNSON

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London W.12

Treating Incontinence Electrically

SIR,—Our experience in a special clinic in a big general hospital of treating incontinence electrically differs from that stated in your leading article (17 June, p. 670). We have had most promising results from treating urinary stress incontinence by electric stimulation of the pelvic floor muscles. When there is no obvious defect of the genital tract we regard stress incontinence as a urological and not a gynaecological problem. We therefore examine every patient for a neurological disorder and for inflammatory or neoplastic lesions of the urinary tract or the pelvis.

As you state, there are three methods of electrical treatment of stress incontinence—the implant electrode, the anal plug electrode, and the vaginal tampon electrode.

We have used the vaginal tampon electrode in female stress incontinence for two years. Patients with cystoceles were referred to the gynaecological department for repair and patients with excessive scarring after gynaecological operations, a short vaginal stump, or a narrow introitus were excluded after an unsuccessful trial. A rectal plug electrode would have been the treatment of choice in those patients. We have treated over 20 cases so far and have followed them up over periods of from two months to two years. Treatment was often combined with oestrogens or testosterone.¹

Your statement that there seems to be no objective method of predicting success in any one patient is, in my opinion, not quite correct. A number of tests have been devised² for predicting the outcome of an operation for stress incontinence. All surgical pro-

cedures³ aim to reinforce the weak levator ani muscle to prevent funnelling of the bladder base. Electrical stimulation acts on the same principle, and why should it be less successful than surgical procedures with the same objective?

The vaginal tampon electrode is worn at night and patients are not usually disturbed by it. There is a slight tingling sensation only when the current is switched on. The treatment is, in effect, topically applied physiotherapy to the pelvic floor muscles. Electrical stimulation for stress incontinence is particularly useful in patients whose general health makes surgery inadvisable.—I am, etc.,

H. KIESSWETTER

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¹ Kiesswetter, H., Meeting of the American Urological Association 1972, *Journal of Urology*, in press.

² Hodkinson, C. P., *Clinical Obstetrics and Gynecology*, 1963, **6**, 154.

³ Uhle, C. A. W., Kohler, F. P., and Mackinney, C. C., *Journal of Urology*, 1968, **99**, 613.

Kirschner Wire Extraction Forceps

SIR,—The use of Kirschner wires for fixing small fracture fragments and also in the elective surgery of small bones and joints is an established and valuable technique. It is often undesirable to leave the end of the wire outside the skin, and it is divided so that the cut end lies in the subcutaneous tissues. The removal of the wire later can pose the problems of limited exposure and difficulty in gripping the end in the depths of a small wound. Similarly there has been no instrument which could grasp with sufficient purchase the end of a wire that has migrated into bone leaving only a short length protruding.

These difficulties led to a search for a forceps suitable in such circumstances. A most satisfactory instrument has proved to be a lower incisor dental forceps of which the lower jaw has been bent so that the tips of the jaws just meet. These grip firmly as little as one millimetre of protruding wire sufficiently strongly to pull out the most tightly-seated Kirschner wire (see Fig.) Since

the hollowed tips of the jaws are already hardened for dental work they are not damaged by this manoeuvre and their narrowness allows them to be inserted to a depth of at least one centimetre through a small incision.

I wish to thank Messrs. Down Brothers and Mayer and Phelps Ltd. for providing the

original forceps and Mr. E. Andrews, instrument curator at the Royal National Orthopaedic Hospital, for his modification to my specifications. I am most grateful to Mr. Whitley, of the Department of Medical Photography of the Royal National Orthopaedic Hospital, who prepared the illustration.

—I am, etc.,

C. L. COLTON

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London W.1

Unit Doses

SIR,—In view of the difficulties caused by the changed potency of Lanoxin tablets may we put forward a suggestion to minimize these? The concept, which is not new, is to simplify dosage by listing standard or unit doses for each drug. For example, a unit dose of digoxin might be set at 0.25 mg, of indomethacin at 25 mg, of penicillin V at 250 mg. The doctor orders in terms of the unit dose, paediatric doses being ordered as fractions of the unit—for example, digoxin $\frac{1}{4}$, $\frac{1}{2}$, or 1 unit dose twice daily, indomethacin 1 or 2 unit doses three times daily, penicillin V $\frac{1}{2}$, 1, or 2 unit doses four times daily.

Apart from its simplicity (especially with drugs of widely differing potencies but similar therapeutic effects, such as the steroids) and its value in reducing the risk of errors caused by faulty translation from imperial to metric by displacement of the decimal point or by confusion between milli and micro, the system would be of advantage to the manufacturer, who could relate the bioavailability of his product to the unit dose. He would be able to market an improved formulation in terms of the unit dose, which would naturally contain a smaller quantity of the drug than before, and much of the confusion arising from the existence of drugs bearing identical labels but with different potencies would be avoided.—We are, etc.,

L. GREENFIELD
J. G. ILES

London N.5

The Hospital Consultant's Secretary

SIR,—Mr. J. H. Gooch and others (19 August, p. 456) emphasize the important role of the consultant's secretary in the smooth running of a hospital unit, concluding that the pay is below a level commensurate with their responsibility. The situation is even less satisfactory in units judged not to merit clerical staff of secretarial grade, in particular, service departments. In such units all the duties described by Gooch and others, including the handling of a large number of general practitioners' and hospital patients and acting as "secretary" to the consultant, are carried out by junior clerical staff for even less pay.—I am, etc.,

P. D. ROBERTS

West Middlesex Hospital,
Isleworth

SIR,—Mr. J. H. Gooch and others (19 August, p. 456) are to be congratulated on their article detailing so carefully the contribution that medical secretaries make to the running of an efficient medical unit. Their conclusions will I am sure be endorsed by all who have worked in similar units or,