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.,

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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.,

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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.,

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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 $\frac{1}{2}$, $\frac{1}{4}$, 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.,

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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.,

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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,