scrotal wall, and if the testicle is attached well back in the scrotum its chances of staying down are that much the better. The correct fixation point is determined more easily from the outside using fine forceps rather than bimanually with a finger in the scrotum. The operator's index finger tends to flex upwards (anteriorly for the patient), with the inevitable result that the suture ends up a little more anteriorly placed than it need be.—I am, etc.,

Sheffield 10

COLIN MADDOX

Tetracycline and Renal Function

SIR,—In one of the recent Therapeutic Conferences on the treatment of pneumonia the use of tetracycline was discussed (2 October, p. 42). The speakers mentioned some of the adverse effects of this drug, including liver damage and the rare Fanconi-like syndrome resulting from outdated or improperly stored tetracycline. However, they did not mention the common complication in the administration of this drug of increasing the blood urea nitrogen in patients with impaired renal function. Indeed, the patient under discussion in the article had a raised blood urea on admission. It is uncommon to see patients referred whose chronic renal failure was well controlled until they were given tetracycline.

The observation of the azotemic effect of tetracycline was first made by Bateman et al. in 1952. Since then a number of reports and studies have been published confirming this finding.1 Tetracycline has an anti-anabolic effect resulting in diminished utilization of amino-acids for protein synthesis and their degradation into urea.2 In addition, tetracycline has a natriuretic and diuretic action which may result in a hypovolemic state which may contribute to the clinical and chemical changes of a rising blood urea.3,4 In those patients with renal disorder, the increased raising the blood urea is often delayed and may not manifest itself for as long as a week after the drug is commenced.

With the onset of the cold weather and the associated epidemic of chest infections, especially in the elderly, it may be well to remember that many of these people have diminished renal function and the administration of tetracycline may increase the morbidity and in some instances the mortality as a result of raising the blood urea nitrogen.—I am, etc.,

C. B. BROWN

Greenwich District Hospital,
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1 Bateman, J. C., Barberio, J. R., Grieve, P., Klop, C. T., and Pierpont, H., Archives of Internal Medicine, 1952, 93, 763.
3 Shils, M. E., and Bayless, M. T., Archives of Internal Medicine, 1963, 115, 58, 39.

Diabetic Clinics in General Practice

SIR,—Like Dr. J. M. Malins and Dr. J. M. Stuart (16 October, p. 161) we have been interested in getting diabetic patients looked after by their own practitioner. However, we feel that the scheme which they describe has important omissions.

The cornerstone of any scheme should be a monthly diabetic clinic held in the practice of the doctor who should be attended by one or two partners in the group who have a special interest in diabetes. We agree that a yearly visit for consultation with hospital staff is desirable and that at this meeting a year's records should be surveyed. Such a scheme has been working in Wolverhampton for six months. Its main object is to achieve that the continuing care of more than 50% of diabetic patients from the practitioners participating in this scheme should be carried out in practice rather than in hospital. Details of this will be published when the scheme has been in operation for a longer period.

Those running diabetic clinics in hospital have always been aware that many practitioners appear not to be interested in looking after diabetics, but this is often through lack of encouragement and opportunity. We have attempted to overcome this difficulty by holding monthly discussion groups with all practitioners involved, and the support for these has been most encouraging.—We are, etc.,

R. G. RUSSELL

Wednesfield, Staffs

F. A. THORN

Royal Hospital,
Wolverhampton

Hospital Waiting Lists

SIR,—The Department of Health states that the number of patients waiting admission to regional hospital board hospitals on 31 December 1970 was 445,081.1 The figure for teaching hospitals in England alone was over 80,000 on that date, making a total of more than half a million. I wish to draw attention to a serious source of error in these statistics, from which so many conclusions are drawn. I refer to the tendency of numerous patients to "shop around," ending up on the waiting-lists of more than one hospital for the treatment of the same complaint, thus artificially and erroneously inflating the waiting list figure for the individual hospital as well as distorting the regional and national figures. The wage rate of offered beds in the hospial to which I am principally assigned, is given with amounts to not less than 10%, a year. Occasionally it is possible to fill the bed with another patient, but all too often neither patient nor explanation reaches us, and the bed is wasted. Sometimes the patient's general practitioner will notify hospital A that the patient is now on hospital B's waiting-list, but there again one cannot expect a busy general practitioner to carry out this additional chore as a routine.

The non-arrival of waiting list patients is a major administrative and clinical nuisance, and I should like to put forward two suggestions, one in the short term and one in the long, designed to bring the situation under better control.

In the short term, patients should be asked to pay a deposit of £5 to £10 which will be placed on its waiting list for admission. This would be refunded in full when admitted or when the hospital is notified that the bed will not be required for any of the reasons given above. Should the patient then ignore the admission notice and show no acceptable explanation of this reach the hospital within, say, a month of the dispatch of the notice, the hospital will hold the deposit, which should be large enough to make patients treat the hospital with proper consideration but not large enough to inflict hardship.

In the long term, the computers owned by the Department of Health should be programmed to record the name, address, N.I. number, hospital bed required, etc, of any patient newly put on a waiting list at any N.H.S. hospital. It would automatically cross-check this patient's details and would warn the admitting hospital and his clinician to recognize the admission of such a patient. It would direct the patient to the first bed becoming available, at which point it would cancel on his behalf other beds awaiting him elsewhere.

I venture to suggest that if these two suggestions were implemented—and they should not be administratively all that difficult—the patients would receive a better service, the N.H.S. would make better use of its beds, and the clinicians and admini- strators would feel marginally less frustrated than they do at the present time.—I am, etc.,

D. P. CHOICE

Westcliff on Sea,
Essex

1 North-east Metropolitan Regional Hospital Board, Red Use Statistics. Regional and Statistical Records Office, 1970.

Psychosis and Ketamine

SIR,—A housewife aged 29 years, was admitted to the Leicester Royal Infirmary for evacuation of the uterus following an incomplete abortion. She was given 10 mg of Cyclimorph (morphine tetrarate and cyclizine tetrarate) as premedication, and the operation was carried out under ketamine 300 mg intravenously, given in one dose.

No more was heard of her until she was seen by a consultant psychiatrist a year later, having been referred by her family doctor as suffering from "hallucinations." She attributed these to the anaesthetic, since with both she had never felt well. The psychiatrist elicited a history that she had "passing out spells," during which her "legs go like jelly." At times she became de-personalized and unreal, and she said that she felt she was leading her life "looking at a film."

The psychiatrist considered she was anxious but not depressed, and drew a comparison with patients who were suffering from the effects of LSD 25.

She was sent for psychometric tests. The psychologist elicited the fact that, following the anaesthetic, she experienced "visions of black balls" and that she had been hostile and not referred to her personally. She had a sensation of "being lifted very high into pink clouds." Since this episode she was somewhat depressed, with the idea of impendence death and, at one time, thought she had a cerebral tumour.

Psychometric testing showed: "Function at 98% of the level of average adult with an I.Q. of 110 (verbal); her performance score was considerably lower and reflected some loss of functional efficiency. Symptom scales showed a moderate level of function but were not sufficiently severe to indicate personality was not neurotic and the tests would indicate relative normality, her present con-
diction due to either a learned reaction or a continuing abnormality of the sort found often in LSD patients."

The above report is produced to demonstrate the unhappily small area of affairs which supervened in a patient who had received ketamine for a routine minor surgical undertaking. It is fully conceded that a patient might well be made of the "psychotic subject" which would breed a long-term disability from an experience which others might throw off in a matter of hours, but this patient's psychometric testing would show her to be relatively normal and, therefore, whatever mechanism produced the long lasting symptoms, attribution to the drug could not easily be denied.

I am grateful to Dr. John Sharach, consultant psychiatrist to Carlton Hayes Hospital for his help, and also to Mr. Derek Burton, psychologist.

I am, etc.,
BRIAN D. JOHNSON
Leicester General Hospital,
Leicester

An Antidysrhythmic Agent

Sr.,—Dr. S. Oram and others' report (9 October, p. 113) on the use of verapamil (Coridol) as an antidysrhythmic agent prompts us to report its use in a further patient with paroxysmal supraventricular tachycardia resistant to other treatment. A 58-year-old man had been seen by us for 2½ years with paroxysmal supraventricular tachycardia after myocarditis of possible viral aetiology. The arrhythmia had failed to respond to various combinations of digoxin, lanatoside C, propranolol, proctolin, quinidine, and atropine compounds. Over the last six months attacks lasting 2 to 24 hours had become increasingly frequent with great reduction in the patient's exercise tolerance. Heart rate had varied from about 140 to 220 per minute.

The electrocardiogram showed a short PR interval of 0-10 seconds, but the QRS width was not increased and there was no slurring of the R wave. A pre-excitation syndrome of the Wolff-Parkinson-White type was therefore somewhat unlikely.

A series of attacks precipitated admission and a moderately raised α-ketobutyric dehydrogenase in the next two days suggested some secondary myocardial damage. The patient was given proctolin 200 mg q.d.s. orally, but a further dose of 40 mg intravenously over 30 minutes failed to control the arrhythmia. Lignocaine 80 mg intravenously caused immediate reversion to sinus rhythm on two occasions, but a lignocaine infusion at 2 mg per minute did not prevent further supraventricular tachycardia.

Verapamil 5 mg in five minutes intravenously immediately produced atrial rate at 110 per minute, and three minutes later sinus rhythm at 76 per minute. Verapamil 80 mg q.d.s. orally failed to maintain this, but with further verapamil 5 mg intravenously at 160 mg q.d.s. orally sinus rhythm has been maintained.

We would like to concur with Dr. Oram and colleagues that verapamil may be of use as an antidysrhythmic agent in arrhythmias, such as resistant paroxysmal supraventricular tachycardia.—We are, etc.,
J. P. D. RICKLEES
W. S. L. GILCHRIST
Department of Medicine, Faculty of Medicine, Oporto, Kent

Visual Field Defect in Glaucoma

Sr.,—A neuroneurochemical lesion is suggested as an aetiological factor in the visual field defect which occurs in glaucoma. The existing theory of arteriolar and capillary ischaemia, giving rise to both the central and peripheral visual fields, is questioned, since vitreous pressure transmitted to the retinal vessels is unlikely to have a particular predilection for the affected nerve fibres. The affected capillaries surrounding the optic cup region are contiguous and are not affected until a considerably later stage. This implies that the vitreous would be exerting differing pressures at points separated by only fractions of a millimetre, which would seem to be improbable.

One common factor which the central and peripheral scotomata share is that the fibres from both take an almost elliptical course, the major axes of the two being at right angles. It is considered that with an increase in intraocular pressure some stretching of the sclera occurs. This is favoured by consideration of the following two items of evidence. Firstly, as the disease becomes advanced, refractive errors occur and are progressive with the increase in intraocular pressure. Secondly, in buphthalmos, where the young sclera is capable of far greater expansion than the adult, the size of the child, a large degree of stretching occurs. Stretching of the sclera is accompanied by a corresponding increase in length of the adjacent nerve fibres. It is considered that those fibres which undergo the greatest increase in length per unit increase in surface area of the retina are those whose course most resembles an ellipse with its minor axis equal to half the length of the sclem.

These are the fibres which are first damaged, and as the condition progresses recruitment occurs of the fibres on either side of these, with development of the characteristic horseshoe scotoma. That maximal damage occurs as the fibres run over the edge of the optic cup, in accordance with the observations of Siedel, is tenable from the physical constraint via the cup at maximal to that point. Pure mathematical proof of such a hypothesis is difficult to obtain because of the presence of so many independent physiological variables.—I am, etc.,
T. V. TAYLOR
Royal Infirmary,
Oxford Road,
Manchester

Cremation Regulations

Sr.,—Dr. T. O. P. D. LAWSON (25 September, p. 770) that this practice is in accordance with common sense even if it is entirely contrary to the official view that a coroner with no medical knowledge or experience is completely competent to reach a final decision without. With respect to them both I am equally of the opinion that if they have only the pathologist's "Cause of Death" copied from the postmortem report upon which to make their final judgement they are not necessarily a great deal better off than a legal coroner.

As Dr. Lawson says, "Let us hope that the Brodrick Committee will recommend a satisfactory solution to this problem," and it is to be hoped that it will bear in mind that it includes cases where disposal is by burial.

At present, unless a coroner happens to be medically qualified, all death certificates it issues are final and inevitably lack the sort of medical validity a legal coroner like Dr. Maingay feels desirable. This situation has itself arisen out of the great preponderance of purely legal coroners, and even though some of them are evidently beginning to take account of its weakness I expect it to be perpetuated by the Brodrick Committee. Indeed it is said that the committee even considered a suggestion that coroners should never be medical men.—I am, etc.,
J. SHACKLETON BAILEY
Suffolk