animals and man. When a dose of phenacetin was increased from 500 mg. to 2.5 g. in human volunteers the formation and excretion of *p*-phenetidin and 2-hydroxyphenetidin sulphate were both enhanced. Neither of these is a metabolite of paracetamol. They concluded that, as a working hypothesis for further investigation to elucidate the pathogenesis of analgesic nephropathy, phenetidin deserved special consideration. Prescott⁵ has commented that the metabolism, and possibly the toxicity of phenacetin, may be modified by the previous or concurrent administration of other drugs. There are therefore "logical reasons" for suggesting that the effect of paracetamol on the kidneys may well be different from that of phenacetin, particularly when phenacetin is consumed in large amounts.—We are, etc.,

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ROBERT A. MILEY.

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Treatment of Shock

SIR,—In their recommendations for emergency treatment of myocardial infarction (3 October, p. 54) the physicians from the Chichester Postgraduate Medical Centre recommend intravenous injection of morphine 10 mg. or diomorphine 5 mg. Extensive experience with intravenous Cyclimorph convinces me that the emetic effects of morphine can be practically eliminated by the use of a harmless anti-emetic such as cyclizine. I cannot see any reason for the continued practice of injecting plain morphine.

They also recommend that if there is hypotension the patient should be kept flat and the bed tilted head downwards. Although the Trendelenberg position is traditional for hypotensive shock¹ the practical, theoretical, and experimental evidence indicates that a horizontal body with elevated limbs is the best position. The head down position will certainly produce immediate improvement compared with the upright posture because it results in the rapid transfer of blood from the limbs to the heart and vital organs.

But the head down position has two disadvantages compared with the horizontal position. Firstly, it causes the viscera to fall against the diaphragm, thus diminishing the volume of the chest, increasing the work of breathing and diminishing the negative pressure in the chest.^{2,3} Secondly, it cannot increase the cerebral blood flow compared with the horizontal position because the arterial and venous pressures will be equally raised so that the theoretical net effect is nil.⁴ However, if the head down position is

maintained for more than a short time it will result in oedema of the brain, which will diminish cerebral blood flow.⁵

These theoretical disadvantages are confirmed by experiments which demonstrate a higher mortality in the head down position, both in toxic hypotensive shock² and in oligaemic hypotensive shock.⁶

We have learnt that, in the resting patient, blood flow in the leg is maximal when the limb is horizontal⁷; the absence of valves in the veins of the skull and neck suggest that this is even more valid in the case of the cerebral circulation. Since the aim of treatment in hypotensive shock is to diminish the circulation in the limbs and increase the circulation in the brain and vital organs without embarrassing respiration the rational treatment is to keep the body horizontal and elevate the limbs.^{8,9}

It took us a long time to realize that heating up shocked patients was irrational and harmful. How long will it take us to abandon the tradition of tipping the shocked patient head downwards? Perhaps our greatest difficulty in abandoning the old treatment is the fact that most hospital beds and resuscitation trolleys are not equipped to facilitate elevation of the limbs while maintaining the body horizontal.—I am, etc.,

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Allergy to Iprindole (Prondole)
with Hepatotoxicity

SIR,—In 1968 I had under my care probably the first case of iprindole hepatotoxicity. He was a young man who had been attending my outpatient clinic at the London Jewish Hospital for chronic anxiety and depression. This was kept under moderate control with amitriptyline and diazepam, but because of a relapse in his condition I changed his medication to iprindole 15 mg. t.i.d. with diazepam 5 mg. t.i.d. on 24 October 1968. One month later when he came to see me again at my clinic he was jaundiced and investigations after admission revealed that this was a case of hepatotoxicity. His jaundice and liver dysfunction cleared up satisfactorily after three weeks. I reported this case to the manufacturers of iprindole, John Wyeth & Brother Ltd., and after studying the case records their scientific staff agreed with the diagnosis of drug toxicity.

However, despite this case, I have continued to use iprindole extensively, particularly with outpatients. I would disagree with Drs. D. F. Harrison and I. M. Stanley (7

November, p. 638) in their suggestion that this drug should be withdrawn by the manufacturers. It is a particularly useful tricyclic preparation in that it has so few side effects and is tolerated so well by most patients. In fact, with anxious patients it is one of the very few antidepressants that they will continue to take in full dosage without complaints of sluggishness, blurred vision, and dryness of the mouth. In the treatment of depressed and anxious patients we must weigh up the pros and cons of each treatment. Against the slight risk of jaundice must be weighed the real benefit to many patients from a drug such as iprindole, and therefore I strongly reject the suggestion that it should be withdrawn.—I am, etc.,

L. J. CLEIN.

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Epsom, Surrey.

SIR,—It would be interesting to know how many cases Drs. D. F. Harrison and I. M. Stanley have treated with iprindole for them to have found four cases of apparent allergic hepatotoxicity (7 November, p. 368).

My interest arises from the fact that I have used this tricyclic antidepressant very widely from the earliest days of its production, and while I have not kept formal note of the numbers of patients involved the relevant figure must certainly be little short of a thousand—and in no case have I observed this allergic effect. I am not disputing the causal relationship postulated in the cases quoted, but I would join issue with the suggestion that "as alternative tricyclic drugs are available with little or no evidence of adverse reactions, we would suggest that iprindole be withdrawn by the manufacturers."

For a start, surely the great attraction of iprindole lies in its freedom from side effects, as distinct from allergic phenomena. I know of no other tricyclic antidepressant with comparable freedom from atropine-like propensities. I think we should remember that the charges that Drs. Harrison and Stanley lay against iprindole have been acceptable occasional hazards of chlorpromazine for many years, and this preparation has certainly stood the test of time on its merits despite these. Even if the possibility of occasional allergic hepatotoxicity is accepted without reservation, this implies that the possibility of the rare occurrence of this phenomenon must be weighed against the undoubted value of a most acceptable (in terms of freedom from conventional side effects) drug, which at the worst is indicted with the production of an effect which reverses on withdrawal.

I would mention that I have regularly used iprindole (15 mg. tab.) in dosage up to 180 mg. per day, and at the present time one of my patients, a depressive psychotic previously dependent upon maintenance E.C.T. for some time despite the exhibition of other antidepressants, is maintained at a reasonable level of freedom from symptoms with iprindole 105 mg. t.d.s. (315 mg. per day), without any side effects whatsoever. In the light of this sort of experience I hope Drs. Harrison and Stanley will forgive my expression of concern at their suggestion that such a useful drug should no longer be

available to me, and I would further hope that the manufacturers, while taking due and proper notice of the cases which have been brought to our attention, will not fail to recall the silent majority who have benefited, and continue so to do, from this drug.—I am, etc.,

M. D. CASHMAN.

St. Annes-on-Sea,
Lancs.

SIR,—A number of reports of hepatic dysfunction associated with the administration of iprindole (Prondol) have appeared in your columns (7 February, p. 367; 25 April, p. 238; and 7 November, p. 368).

Iprindole has been available to hospitals from November 1967 and to general practitioners from August 1968. Since its introduction it has been widely prescribed and commented upon as being a useful anti-depressant compound with a low incidence of anticholinergic side effects.^{1,2}

To date, some 44 cases of liver dysfunction have been reported with the use of this drug, associated with the usage of 63 million tablets over the three-year period. The reports vary from raised transaminases and bile in the urine on the one hand to overt clinical jaundice on the other; patients concerned returned to normal on withdrawal of the drug.

I would, therefore, like to re-emphasize the statement in our technical literature where the side effects, precautions, and contraindications to be considered when this drug is used are enumerated. Attention is drawn to the fact that jaundice has been reported, and that in such cases further treatment with the drug is contraindicated—as it is with patients who have had a previous history of hepatic disorder.—I am, etc.,

D. J. RICHARDS,
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Accident and Emergency Services

SIR,—My letter concerning accident and emergency services (14 November, p. 429) might be construed as suggesting that the casualty department at St. Mary's Hospital (Harrow Road) is not efficient. I wish to correct any such impression by stating that it is an excellent department giving a very high standard of care to patients, and good training for potential surgeons.—I am, etc.,

NIGEL H. HARRIS.

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Vasectomy

SIR,—As my name was mentioned in Mrs. Helen Wolfers's article on psychological aspects of vasectomy (31 October, p. 297) may I make it clear that, while I was interested in her observations, I do not agree with all conclusions. For example "...

submission to vasectomy may itself be indicative of personality disorder. . . ." Not so. A man whose family is complete is doing the sensible thing in having vasectomy. In interviewing three thousand candidates for vasectomy my colleagues and I have found that an outstanding characteristic of the men is that they are considerate and thoughtful, men who do not want to risk unwanted pregnancies or to subject their wife to sterilization or years of pills.

Further, "... a contraceptive method with harmful side effects . . ." could not, in my experience, be fairly applied to vasectomy. "... It is reasonable to assume that histories of pre-existing marital, sexual, or psychological instability should be taken as a contraindication to vasectomy. . . ." Not so, but as a contraindication to having (further) children. The couple has asked for a small operation that would spare them work, anxiety, and expense. Any child would have, as well as the possibility of genetic defect, the disadvantage of being brought up by parents with instability.—I am, etc.,

J. K. MONRO.

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Retaining Device for Nasogastric Tube

SIR,—The standard method of retaining a nasogastric tube in position is to fix it to the patient's nose with a piece of zinc-oxide strapping. This simple but crude method has the disadvantages that it is uncomfortable for the patient and deters easy adjustment of the tube's position. Further it cannot be assumed that the position will remain correct throughout the period of its utilization as kinking may occur. Change of position of the patient, retching, and alterations of gastric tone may subsequently prevent the tube coming into contact with the stomach contents. A "nil" gastric aspiration result recorded repeatedly on the balance chart is the give-away of the situation, and indicates the necessity for adjusting the tube's position.

An alternative means of retaining a nasogastric tube in position is a flange 4 cm. by 6 cm. made of German silver bearing at right angles to it a fenestrated blade with

slots of graduated size to accommodate the several gauges of nasogastric tubing (Fig.). The flange of the device is stuck to the patient's forehead with a double-sided plaster; the tube correctly positioned is threaded through the fenestrated blade, which acting with a cleat action grips it and holds it in position without occluding its lumen which remains clear for intermittent aspiration and open drainage. Disposable bags suitable for open drainage management of nasogastric tube are available.

Adjustment of the tube's position is readily accomplished by liberating it from the cleat until the new correct position is obtained then cleating the tube again. These devices can remain in position for several days and are well tolerated by patients who quickly become unaware of their presence.—I am, etc.,

LAURENCE F. TINKLER.

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Bristol.

Thyroid Dysfunction

SIR,—Your timely leading article (11 July, p. 61) on the protean symptomatology of myxoedema draws attention to how easily one can miss the diagnosis of early hypothyroidism. The importance of diagnosing early thyroid failure, however, cannot be overemphasized.

For the past eight months biochemical investigations (measurement of thyroid function—T-3 uptake) have been done on autistic children at the radiotherapy department of the Royal Berkshire Hospital. The study was based on 62 autistic children diagnosed on the nine points Creak scale. Out of these 62 autistic children, 45 were found to be hypothyroid and two were hyperthyroid.

The hypothesis I put forward is that some children diagnosed as autistic are, in fact, suffering from the thyroid dysfunction. Some biochemical disturbance is taking place in the hypothalamic-pituitary-thyroid-adrenal axis manifested clinically as an autistic syndrome or childhood psychosis. The syndrome presents different clinical pictures of hypothyroidism (myxoedematous features) and hyperthyroidism. The autistic manifestations of thyroid failure have occurred as a result of delay in diagnosing early hypothyroidism or hyperthyroidism.

Autism can be a feature of thyroid dysfunction and thyroid disturbance can produce childhood psychosis or autistic syndrome. It is therefore suggested that all children with autistic features should have routine thyroid function tests done.—I am, etc.,

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Oxford.

Complication of Hysterotomy

SIR,—I wish to report an unusual, yet important, complication of hysterotomy. This I believe will be of general medical interest, especially for those who are involved with undertaking termination of pregnancy.

A 33-year-old housewife was admitted to hospital for abdominal termination of pregnancy and sterilization. The indications were parity, proctocolitis, and acute anxiety.