Low Molecular Weight Dextran Infusions

SIR,—Referring to the article by Dr. Peter Lane, "Low Molecular Weight Dextran Infusions in Systemic Sclerosis with Raynaud's Phenomenon: A report of Nine Cases" (12 December, p. 657), I should like to make the following comments.

Unfortunately, the exact values of the skin-temperatures before and after the low molecular dextran were not given, but only the differences. I am afraid therefore a very fundamental and very common mistake may have been made in the interpretation of these.

If the exposure to heat gives a maximum vasodilatation in the skin, it cannot be expected that increased blood flow will give a further rise in skin temperature. Furthermore, it is not certain when the patient's heat regulation is intact that plasma-expansion alone should increase peripheral blood flow. If the possible flow-improving effects of the low molecular dextran would cause an increased peripheral flow, this will not cause a further rise in skin temperature, but can only be detected by other measurements.

Working with the same problems, I have used an air-conditioned room at a temperature of 20°C. When the feet are cooled to room temperature, and the temperature of the thumb starts to fall because the patient's normal heat regulation is intact, I block this by adding 25 mg chlorpromazine to 500 ml of 10% Rheomacrodex given within half an hour or threequarters of an hour. The changes in skin temperature are then recorded.

By combining vasodilatation simultaneously with plasma expansion drops in blood pressure are usually very small; this gives information about the vasomotor activity. If the vasomotor activity is good the infusions are given daily until a clinical effect has been obtained; this is then maintained by giving tablets of chlorpromazine 10 mg three times a day.

If there is no or very little change in vasomotor activity the chlorpromazine cannot be expected to have much effect. Anyhow, the procedure is repeated daily for 10 days, and then the skin temperatures are measured again under the same conditions as the first time.

I have then seen a patient in whom the skin temperature of the thumb at the beginning was 10°C higher than that of the feet. After 10 days' treatment the skin temperature of the feet was 10°C higher than the temperature of the thumb before the last infusion was given. This shows a definite effect of improving the blood circulation in the lower extremities, where the vasomotor activity is still lost. The hands normally get warm before the feet.

This whole subject seems to me to be very controversial, and the results from different clinics are very difficult to compare. With our technique we have better results than those referred to in Dr. Lane's article. This may be due to the daily treatment over a longer period of time. Naturally, we have failures too, but I wanted to draw attention to the combined attempt of making the possible vasodilatation combined with the plasma-expansion and possible flow-improving effect of the low molecular dextran. It has proved itself very useful in the treatment of shock at times when con-

ventional shock-therapy has not yet been effective.

I wish to compliment the author on his interest in this subject. There is much to be gained, and I agree with him that larger series than his and mine are necessary before complete evaluation is possible. We probably need better diagnostic procedures as well.—I am, etc.,

BJORN IBSEN

Department of Anesthesiology,
Kommunehospitalet,
Copenhagen

Metric Visualization

SIR,—The practice of indicating metric measurements in brackets is of great assistance to those readers not fully conversant with Anglo-Saxon units of measurement. In particular this enables them to better visualize patients from the quoted height and weight.

While agreeing with your correspondent (16 January, p. 174) that 124 kg (273½ lb) is somewhat overweight for a woman of 210 cm (82½ in), it appears rather an exaggeration to describe her as of "gross appearance". Perhaps "statuesque" would be a better description of such a woman.—I am, etc.,

R. G. CAMERON

Basel, Switzerland

Analgesics in Gynaecology

SIR,—Dr. V. R. Tindall (6 February, p. 329) states in his article on dysmenorrhoea "Acetyl salicylic acid and phenacetin and codeine, alone or in combination (proprietary or non-proprietary), are the most commonly used analgesics."

Surely this advice is ill-founded and bad. I thought phenacetin had been shown to be (a) virtually useless and (b) positively harmful. Dr. Tindall may claim that he does not in fact recommend it, but this is by no means clear from the wording of his article.

Our experts really ought to be more careful.—I am, etc.,

EDWARD BEVAN

Cambridge

Anticonvulsant Therapy and E.E.G. Recordings

SIR,—As a result of an inquiry it has recently been drawn to the attention of the British Epilepsy Association that patients with epilepsy may sometimes be advised to discontinue their anticonvulsant therapy immediately before presenting themselves for an E.E.G. examination. Practitioners might, therefore, care to be reminded that such a practice may result in the patient having an epileptic attack and that such an occurrence is likely to create difficulties if there is any question of obtaining a driving licence.—I am, etc.,

MAURICE PARSONAGE,

Chairman of the Medical Committee,
British Epilepsy Association

London, W.C.1

Beri-Beri in Blackpool

Sir,—Wet beri-beri, endemic among the rice-eating populations of South-east Asia and the white-flour eating population of

Labrador and Newfoundland^{1,2} is thought to be rare in Britain. That the disease may be commoner than is generally supposed is suggested by the following case histories of patients admitted to the psychiatric wards of Wesham Park Hospital.

Case 1.—An 80-year-old female, living alone since the death of her husband three years before, had become progressively more depressed, inert, and self-neglectful. She slept poorly, ate little, lost a good deal of weight, was quite hopeless about the future, and thought of suicide. She had a 20-year history of anginal attacks. Because she refused all forms of treatment she was compulsorily admitted on 10 November 1970. On examination she appeared depressed and retarded but memory and cognitive functions were intact. She was underweight, and had an erythematous rash on the face and "sunburn" areas. Pulse regular and of good volume. B.P. 125/80, cardiovascular system normal except for occasional extrasystoles. There was pitting oedema of the ankles. A diagnosis of high output congestive cardiac failure was made and for a few days she received digoxin 0.25 mg t.d.s., frusemide 40 mg on alternate days, and Slow-K 1 tablet t.d.s. Investigations showed blood pyruvate 3.5 mg/100 ml (normal 0.4-0.6 mg/100 ml); haemoglobin 9.3 g/100 ml (64% of average normal); plasma proteins, albumin 2.7 g/100 ml and globulin 4.2 g/100 ml (albumin/globulin ratio = 0.6/1). Chest x-ray showed marked enlargement in the transverse cardiac diameter. A diagnosis of depression, malnutrition, and thiamine deficiency was made.

Case 2.—A male school caretaker, aged 48, with a history of partial gastrectomy for gastric ulceration in 1950, whose wife had committed suicide two years previously, became very depressed near the anniversary of her death. The mood was aggravated by the theft of his car and disappointment in a love affair. He lost interest and appetite, and cooked little for himself. Unable to sleep without tablets and feeling life not worth living, he was admitted on 20 November 1970. He was depressed and apprehensive, but sensorial functions were intact. There was marked recent weight loss. Cardiovascular system was normal, but the liver was palpable three fingers below the costal margin. His lower limbs were ataxic and the calves wasted, and he had marked pitting ankle oedema. Blood pyruvate 1.7 mg/100 ml; haemoglobin 9.8 g/100 ml (67% of average normal).

On the day after admission he had two grand mal attacks. Two E.E.G.'s showed no focal abnormality, and since he later admitted taking large quantities of barbiturates daily over several months these were regarded as barbiturate-withdrawal fits (seven days after admission his blood barbiturate level was 0.9 mg/100 ml). A diagnosis of depression, malnutrition with thiamine deficiency, and barbiturate addiction was made.

Both patients were given daily intravenous vitamin injections (Parentrovite) and oral iron. Within three weeks depression and oedema had cleared and they had gained weight. At discharge they were well physically and mentally.

Vitamin deficiency diseases occur sporadically in the British Isles and are then usually conditioned by other factors—gastro-intestinal and psychiatric disorders, alcoholism, food-faddism, and social isolation

among the elderly infirm. In severe depression loss of appetite and self-neglect are almost invariable so that various forms of avitaminosis are seen—for example, folate deficiency^{3,4} and Wernicke's encephalopathy (personal observation). Mixed vitamin deficiency syndromes seem to be more common than "pure" forms so that the rash of the first patient may have been a pellagrous manifestation, responsive to the nicotinamide fraction of the whole vitamin B injection.

Thiamine deficiency is frequently misdiagnosed and it is noteworthy that the first patient was initially treated for congestive cardiac failure. Beri-beri would probably be more frequently recognized if the possibility were considered in "at risk" patients, particularly those in psychiatric and geriatric wards with peripheral oedema (unaccompanied by proteinuria) unresponsive to treatment. The rapid response of both psychiatric and physical symptoms, exemplified by the above cases, makes the exercise all the more worth while.—I am, etc.,

M. W. P. CARNEY

Blackpool and Fylde Hospital Group,
Lancs.

¹ *Price's Text Book of the Practice of Medicine*, 9th edn, ed. D. Hunter, p. 468. London, Oxford University Press, 1956.

² *Price's Text Book of the Practice of Medicine*, 10th edn, ed. Sir R. B. Scott, p. 404. London, Oxford University Press, 1966.

³ Carney, M. W. P. *British Medical Journal*, 1967, 4, 512.

⁴ Reynolds, E. H., Preece, J. M., Bailey, J., and Coppen, A., *British Journal of Psychiatry*, 1970, 117, 287.

Calling the Doctor

SIR,—Last week a pharmacist was recounting to a group of business men, in my presence, his experience on a recent Saturday morning, when a lady was brought into his shop with severe epistaxis which he failed to arrest. The patient's own doctor was off duty and the duty doctor refused to come saying "Send her to the hospital" (20 miles (32 km) away). This, said my friend, he could not do, as she was spilling blood everywhere. Fortunately, after some delay, someone met the patient's own doctor in the town and he came and did the necessary first aid treatment before removal to hospital.

I listened to this story with shame. Should not the fact that a qualified pharmacist sends for us be a sufficient justification for a call? Should we allow unqualified secretaries to decide whether we are to visit our patients when they send for us? Should they give medical advice over the phone when we are not out?—I am, etc.,

DAVID H. SMITH

G-6-PD Deficiency and Piperazine

SIR,—We were recently confronted with a 4-year-old African child who was diagnosed as having a haemolytic anaemia. His haemoglobin was 3.9 g/100 ml with 33% reticulocytes, exhibiting Heinz body formation; the serum bilirubin was 5.4 mg/100 ml with an indirect fraction of 3.1 mg/100 ml. A Coombs test and tests for cold agglutinins were negative. The only positive findings were that this patient had a G-6-PD deficiency of the negroid variety, which was demonstrated on several specimens of blood over a two month period once his reticulocyte count had fallen to normal. The re-

mainder of his family, five in number, were all normal in this regard.

We were unable to find any cause for this episode of haemolysis, the first this patient had suffered, except that two days prior to admission, he had taken some Pripsen (piperazine and senna) for roundworms. We have been unable to find any report of this drug causing haemolysis in association with G-6-PD deficiency, although we feel that a causal relationship could still exist. H. Seftel (personal communication), who has wide experience in the use of piperazine in South Africa, has never come across this problem, and makes the point that if it were a common relationship it should have been reported somewhere in the literature on the basis that G-6-PD deficiency and roundworm infestation are linked geographically.

We would be most interested to know if any of your readers, more especially in tropical countries, have come across this particular problem.—We are, etc.,

N. BUCHANAN

Baragwanath Hospital,
Johannesburg, S. Africa

R. CASSEL

T. JENKINS

South African Institute for Medical Research,
Johannesburg, S. Africa

Gastric Acid Secretion

SIR,—I refer to the statement that "In man acid secretion appears to be of little importance, for achlorhydric patients come to no clinical harm from lack of acid" quoted in your leading article "Acid Tests for Peptic Ulcer" (23 January, p. 186).

May I put in a plea on behalf of these unfortunate patients whose dyspeptic symptoms are often troublesome, often intermittent for years, and can become progressively worse during their fifties. One minute of history-taking which discloses a dyspeptic pattern of fullness and distention after small bulk meals, episodes of burning regurgitation described as a "boiling up" discomfort, and difficulty in digesting fruit, especially apples which tend "to stick", should alert one to thinking that here is someone who is failing to digest food adequately. These patients get relief from their symptoms by taking dilute hydrochloric acid 3-4 min (0.2 ml) in water before meals. Surely the reasoned answer is that dilute hydrochloric acid assists the digestion where the gastric mucus is failing to produce adequate amounts of acid. To me this is the clinical picture of borderline atrophic gastritis where treatment is well rewarded.—I am, etc.,

A. M. MCGREGOR

Turrieff,
Aberdeenshire

Schatzki's Ring

SIR,—Your description of Schatzki's ring (13 March, p. 567) adds confusion to this rare condition by including with it fibrous strictures of the lower end of the oesophagus secondary to reflux oesophagitis and hiatus hernia.

The suggestion that "fibrosis and chronic inflammatory changes . . . in the submucosa" are present varies from the original de-

scription. One of Inglefinger and Kramer's¹ cases was operated upon and showed "no evidence of inflammation or fibrosis, but extreme muscular thickening." Schatzki and Gary² report in their paper that their one case operated upon showed no histological evidence of "ulcer, scar or inflammation."

The ring is a localized muscle spasm which may be associated with a hiatus hernia, but not necessarily so; it may progress later to a fibrous stricture if there is continued reflux oesophagitis. But when a Schatzki's ring is present it is possible, under general anaesthesia, to pass an oesophagoscope through the relaxed muscle and into the stomach; that is what differentiates it from the fibrous stricture with which you confuse it.—I am, etc.,

A. G. NORMAN

Royal Infirmary,
Sheffield

¹ Inglefinger, F. J., and Kramer, P., *Gastroenterology*, 1953, 23, 419.

² Schatzki, R., and Gary, J. E., *American Journal of Roentgenology*, 1953, 70, 911.

Tongue-twisting Jargon

SIR,—Dr. P. Bye (20 March, p. 673) may be correct in his general comments but unfortunately he specifically considers "osmolality" and "osmolarity," which have only a verbal similarity; osmolality refers to the concentration of a solution in moles per 1,000 g of solvent, whereas osmolarity refers to it in moles per 1,000 ml of solution. There is apparently some value in using these different terms where concentration is measured from the physical properties of solutions. The tongue twistality (or is it twistarity?) of such words at least means that they become audibly differentiated because the speaker needs to enunciate them carefully. Words like abduction and adduction are frequently misheard so that several of my American colleagues pronounce them "A.B.duction" and "A.D.duction."

As verbal communication becomes increasingly more important—be it telephonic or tape recorded—perhaps we ought to pay more attention to verbally confusing words, but can we expect this of a profession which uses the same sounds for mouth (oral) as it does for ear (aural)?—I am, etc.,

PETER ROBSON

Newcomen Centre, Guy's Hospital,
London, S.E.1

** Other correspondents have written to make the same point as Dr. Robson about the meaning of "osmolality" and "osmolarity."—ED., *B.M.J.*

Endocrine and Metabolic Disorders in Bronchial Carcinoma

SIR,—I was interested in the comments made by Drs. P. von Wichert and P. F. Mitchell-Heggs (6 February, p. 345) on the high incidence of hypercalcaemia in bronchial carcinoma reported by Dr. J. G. Azzopardi and others (28 November, p. 528).

In a recent series of lung carcinoma cases studied in Jersey the serum calcium was found to be raised in 17 out of 103 patients. There was necropsy or radiological evidence of bone metastases in nine patients and no clinical evidence of the hypercalcaemic syndrome in the remaining eight. Locks¹ found that in 2% of 119 lung