Medicine on Television

SIR,—The present tendencies of television programmes which depict the problems of care for the mentally handicapped are a cause of concern to those who work in the Health Service. Distortion of the full picture by selective editing presents the public with a view of hospital care which may be true in certain places at certain times; it is not, however, representative, and in a recent programme on autism the position of children in hospital was described as "a fate worse than death." In fact, much positive therapy is achieved under difficult conditions and with inadequate staffing. New advances in care and in providing small group living are being made in many places.

The negative image which is given to all hospital care is destructive and is likely to cause a deteriorating service; it lowers the morale of those who work and hinders recruitment of people of the right calibre and motivation. It may also cause despair and hostility in those parents who have at present no alternative but to use our services. I would like to see more public appreciation through the mass media of the optimistic therapeutic approaches which are now being used in this field.—I am, etc.,

M. WAY

Earls House Hospital, Durham

Glomerulonephritis Associated with *Coxiella burnetii* Endocarditis

SIR,—Like Drs. J. R. E. Dathan and M. F. Heyworth (15 February, p. 376) we have observed the association of valvular heart disease, nephrotic syndrome, haemolytic anaemia, and extremely high antibody titres to *Coxiella burnetii* (complement fixation test, phase I 1/1280, phase II 1/2560).

The patient concerned was a woman born in 1933 who presented two years ago with exhaustion, nose bleeds, anaemia of acquired haemolytic type, and evidence of acute nephritis. She had been known to have valvular heart disease for some years and there were signs of mitral regurgitation. She was treated with digitalis, diuretics, and later prednisone and azathioprine for 14 months. She was then reinvestigated because of persistent oedema and proteinuria averag-

ing 9 g daily. It was felt that immuno-suppressive therapy was not helping her and this was discontinued under ACTH cover. At this time a generalized morbilliform rash was noted and a virus infection suspected and it was then that raised Q-fever antibodies were discovered. A renal biopsy on this occasion showed histological features of diffuse mesangial thickening with a moderate increase of cellularity and capsular adhesion (see fig.). Immunofluorescence studies showed heavy deposition of IgG and B₂C complement in relation to the glomerular basement membranes. At no time, however, were L.E. cells discovered and tests for hepatitis B antigen were negative. She has been treated with tetracycline with reduction of urinary protein output from an average of 8 g/day to 4 g/day without alteration of blood urea levels.

It seems, therefore, that Q fever with endocarditis must certainly be regarded as another cause of immune complex nephritis.—We are, etc.,

G. H. HALL

ROBERT J. C. HART

SYLVIA W. DAVIES

MICHAEL GEORGE

ADRIAN C. HEAD

Royal Devon and Exeter Hospital (Wonford), Exeter

Convulsion following Maprotiline Overdose

SIR,—We have recently managed a case of self-poisoning with the new tetracyclic antidepressant maprotiline hydrochloride (Ludomil) which was complicated by a convulsion.

The patient, a 20-year-old housewife, suffered from postnatal depression aggravated by her husband's absence at sea for long periods. She had no past history of epilepsy. After two days of treatment she took 17 25-mg tablets (425 mg) at about 10 a.m. On admission at 7 p.m. she was conscious, there were no neurological signs, and her blood pressure was normal. A grand mal fit lasting about one minute occurred shortly after the patient had been admitted to the ward. No cardiac arrhythmia developed. Plasma calcium, urea, and SGPT were normal. An unremarkable recovery ensued and the patient was discharged two days after admission.

Convulsions are not uncommon in patients taking tricyclic drugs¹ in therapeutic doses and are a recognized feature of the poisoned patient. It appears that maprotiline is much less likely to lead to convulsions.² Our experience in this case, however, suggests that it may do so.—We are, etc.,

DAVID MEEK

M. H. BOTT

H. MAMTORA

ROGER GABRIEL

Royal Infirmary, Hull

¹ Dallos, V., and Heathfield, K., *British Medical Journal*, 1969, 4, 80.

² *Depressive Illness*, ed. P. Kieholz. Berne, Huber, 1972.

Anaemia in Pregnancy

SIR,—I read with interest the letter from Mr. T. Lind and his colleagues (15 March, p. 627) in which they put forward the hypothesis that haemodilution occurring in pregnancy may be beneficial in creating a more favourable environment for the developing fetus. They accept that the risk of true anaemia is increased during pregnancy but make no mention of iron balance studies

which seem consistently to demonstrate that normal pregnant women go into negative iron balance, regardless of diet if given no iron supplements.¹

Since anaemia is known to be associated with impaired placental function² it seems important to study the effects of haemodilution uncomplicated by anaemia on fetal well-being. A small study was undertaken in this department into the relationships between birth weights and haematocrit changes used as an indicator of the degree of haemodilution. One hundred consecutive cases were reviewed. The haematocrit values, calculated by the Coulter counter at the booking visit to the antenatal clinic, were compared with those at 34 weeks of pregnancy. Cases were eliminated in which the time interval between booking and 34 weeks was less than 10 weeks, in which the haemoglobin level was below 11 g/dl, and in which the pregnancy was complicated by other abnormalities such as pre-eclampsia, diabetes, or antepartum haemorrhage, conditions known to be associated with abnormal birth weight. A total of 23 patients were eliminated, leaving 77 for study. All received iron and folic acid supplements during pregnancy. The birth weight was noted and also expressed as a percentage of the 50th centile of the expected weight, standardized for maternal parity, duration of gestation, and the sex of the baby.³ The mean haematocrit at booking was 37 ± 2.7 (S.D.)% and at 34 weeks 36.2 ± 3.1 %. In 45 cases (58.4%) the haematocrit fell between booking and 34 weeks and in 32 (41.6%) the level rose.

In the group of 45 cases in which the haematocrit fell during pregnancy the mean birth weight was 3217 ± 366 g compared to 3321 ± 625 g in the 32 in which the haematocrit rose. The mean of the birth weights expressed as a percentage of the 50th centile (see above) in the decreased haematocrit group was 95.9 ± 9.8 and in the increased haematocrit group 99.5 ± 16.9 . None of these differences is significant.

Admittedly the extent of the haematocrit changes in our study group was limited because they had been on prophylactic iron. However, within these limits there appeared to be no relationship between haematocrit and birth weight.—I am, etc.,

D. J. THOMAS

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¹ Wallerstein, R. O., *Clinics in Haematology*, 1973, 2, 453.

² Beischer, N. A., et al., *American Journal of Obstetrics and Gynecology*, 1968, 102, 819.

³ Thomson, A. M., Billewicz, W. Z., and Hytten, F. E., *Journal of Obstetrics and Gynaecology of the British Commonwealth*, 1968, 75, 903.

Misleading Drug Advertising

SIR,—I would like to clarify two points raised by Dr. A. J. Jouhar (5 April, p. 38). It was pointed out at the recent symposium on sotolol to which Dr. Jouhar refers that the membrane-stabilizing action (alias direct depressing effector quinidine-like action) of beta-adrenergic blocking drugs may be of pharmacological interest, but it is of doubtful clinical relevance.¹⁻⁴ It is perhaps one of the notable pharmacological red herrings drawn across the therapeutic trail for a long time. The membrane-stabilizing action has no relevance in hypertension,⁵ the

membrane-active non-beta-blocking D-isomer of propranolol has no hypotensive effect. The same is true of angina pectoris,^{4,6} and even of arrhythmias.⁷

It was emphasized in discussion at the sotalol symposium that the cardiac inhibitory effects of beta-blocking drugs at the dosage used in man was a function of beta-blockade and nothing to do with the membrane-stabilizing action of these drugs.^{1,2} This has been amply supported by animal work.⁸ It is quite untrue to say that there is any evidence to suggest that the membrane-stabilizing action of beta-receptor-blocking drugs is concerned in the production of left ventricular failure in susceptible subjects. All effective beta-receptor-inhibiting drugs are likely to precipitate heart failure in patients in whom cardiac function is critically dependent on increased sympathetic activity,² a predictable effect, as such a pharmacological action is interfering with the compensatory tachycardia of cardiac insufficiency. Again experimental work suggests that it is beta-blockade per se—not membrane activity or intrinsic sympathetic activity—that is relevant in producing this action.⁹ This conclusion was not effectively challenged at the sotalol symposium.

Secondly, it is premature and almost certainly untrue to suggest that in hypertension sotalol is independent of plasma renin levels *unlike* propranolol. While Verniory *et al.*¹⁰ found no correlation between plasma renin and the response of hypertensive patients to sotalol, so others have failed to find such a correlation with other beta-blocking drugs,^{11,12} though this remains very much a matter for debate. While the mode of beta-receptor-blocking drugs in hypertension is still disputed, it is unlikely that there is a difference between one beta-blocking agent and another.—I am, etc.,

B. N. C. PRICHARD

University College Hospital Medical School,
London W.C.1

- 1 Shanks, R. G., in *Advances in Beta-adrenergic Blocking Therapy: Sotalol. Proceedings of an International Symposium*, ed. A. G. Snart. pt. I, p. 73. Amsterdam, Excerpta Medica.
- 2 Prichard, B. N. C., *ibid.* pt. V, p. 87.
- 3 Prichard, B. N. C., and Boakes, A. J., *ibid.* pt. IV, p. 7.
- 4 Prichard, B. N. C., and Vrhovac, B., *ibid.* pt. II, p. 1.
- 5 Simpson, F. O., *Drugs*, 1974, 7, 85.
- 6 Prichard, B. N. C., *Drugs*, 1974, 7, 55.
- 7 McNicol, M., in *Advances in Beta-adrenergic Blocking Therapy: Sotalol. Proceedings of an International Symposium*, ed. A. G. Snart. pt. V, p. 89. Amsterdam, Excerpta Medica.
- 8 Fitzgerald, J. D., Wale, J. C., and Austin, M., *European Journal of Pharmacology*, 1972, 17, 123.
- 9 Barrett, A. M., and Nunn, B., *Archives internationales de Pharmacodynamie et de Therapie*, 1971, 189, 168.
- 10 Verniory, A., *et al.*, in *Advances in Beta-adrenergic Blocking Therapy: Sotalol. Proceedings of an International Symposium*, ed. A. G. Snart. pt. IV, p. 36. Amsterdam, Excerpta Medica.
- 11 Stokes, G. S., Webber, M. A., and Thornell, I. R., *British Medical Journal*, 1974, 1, 60.
- 12 Morgan, T. O., *et al.*, *British Journal of Pharmacology*, 1975, 2, 159.

support voluntary euthanasia have been pressing. That this is not so is evidenced by the continuing occurrence of suicides in those suffering from terminal conditions (18% of "successful" suicides are associated with organic illness).

It is clear that the establishment, as represented by the clergy and the majority of doctors, obstinately refuses to accept the burden society in general is asking them to bear—that is, a direct aiding and expediting of the dying act on request. Other arguments suggested in the report are attempts to rationalize this fundamental refusal, which mirrors a curious hardness of heart out of keeping with the generally more liberal and empathic spirit of contemporary thinking. Surely assisted suicide is better than unassisted when the subject has decided (with reason) against further living, or do we insist that we always know best?—I am, etc.,

S. L. HENDERSON SMITH

Huddersfield

SIR,—None will disagree with your assessment of the report on euthanasia by the Church of England's Board for Social Responsibility (29 March, p. 704). Of course it is right and proper that all those who are dying or likely to die within days or weeks should be helped to do so without suffering, and there is no reason why the appropriate treatment should ever be withheld, given adequate staff with knowledge, sympathy, and compassion and the means to carry this out.

To my mind these are not the difficult cases. Take that of a man who is half-paralysed, perhaps with difficulty of speech or part loss of hearing and sight, and perhaps with some incontinence, but with adequate mental capacity to realize that he cannot really improve, in spite of every attention, to a degree which might be tolerable; also that he might live like this for another 10 years without being able to take part in any worthwhile activities. He longs to be out of it all, and suicide is either a messy and lonely affair or it is too difficult to achieve for a person in this situation. To get the pills and find a place where he can consume them without any risk of being discovered and resuscitated is almost impossible. He almost demands "assisted suicide" in a helpful and comfortable atmosphere and is justified in doing so.

Most suicides are tragedies and occur in fits of depression which are curable. They cause anguish in the family and complete loss of a possibly useful future. The type of case I have described—and there must be very many of them—is quite different. This man has completed his life's work for good or ill and deserves to go if he so desires.—I am, etc.,

O. GAYER MORGAN

Walberswick, Suffolk

Sand Pneumoconiosis in an Egyptian Mummy

SIR,—Your recent leading article on "Negev Desert Lung" (14 December, p. 614) prompts us to record the presence of a histologically similar condition which we have found recently during studies on the Egyptian mummies in the Manchester Museum.

Nekht-Ankh, a 12th dynasty male, appears to have been 60 years of age when he died. His lungs had been removed at mummification and placed in one of the four canopic jars found in the tomb. After rehydration and fixation of the lung in formol saline paraffin sections were cut, which showed brown birefringent particles around blood vessels and in fibrotic areas of the lung (figs. 1 and 2). These areas have been examined electron optically and the particles analysed with a Kevex Si (Li) detector attached to an A.E.I. Corinth 275 electron microscope. The analysis showed that they contain silica and iron and are presumably fine particles of stone or sand.

FIG. 1—Prominent particles around blood vessel. (Toluidine blue $\times 200$.)

FIG. 2—Particles in fibrous tissue in scarred area. (Toluidine blue $\times 100$.)

We do not know the occupation of this man, but from the type of mummification and entombment it is unlikely that he was a manual worker—that is, a stone mason. We do know, however, that sand storms were a frequent occurrence in ancient Egypt and it is interesting to speculate, therefore, that "sand pneumoconiosis" as described in the Bedouins by Bar-Ziv and Goldberg¹ may be a condition of considerable antiquity.

Our thanks are due to Dr. A. R. David, Assistant Keeper of Archeology, Manchester Museum, for access to this material, and to Miss D. Chescoe and Miss M. Samuels of A.E.I., Trafford Park, Manchester, for the analysis.

—We are, etc.,

E. TAPP
A. CURRY
C. ANFIELD

Department of Pathology,
Withington Hospital,
Manchester

¹ Bar-Ziv, J., and Goldberg, G. M., *Archives of Environmental Health*, 1974, 29, 121.

Imported Sterile Water

SIR,—Like Mr. C. Shaldon (19 April, p. 142), I too have been astounded and perplexed that a country like Great Britain appears to be incapable of sterilizing water. I have heard of Scottish water being exported to America so that Scotch whisky

An Easy Death

SIR,—Your leading article on the Church of England's recent contribution to the euthanasia debate (29 March, p. 704) supports the current view that hospice-type care has eliminated any further need for the "arranged dying" for which those who