administrative difficulties associated with the Mental Health Act were to become too great an additional burden, then, failing sufficient available money to build suitable modern treatment units offering moderate security in each region, many more unfortunate patients would have to be sent to the few remotely situated Special Hospitals, far from their homes and families.—We are, etc.,

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Cephaloridine and Staphylococcal Endocarditis

SIR,—Dr. R. D. Foord and Dr. E. E. Snell in their letter (31 December 1966, p. 1656) disagree with the opinion expressed in our report of a fatal case of staphylococcal endocarditis (19 November 1966, p. 1244) that cephaloridine is not suitable for the treatment of severe infections due to penicillinase-producing staphylococci.

They state that other antibiotics have failed to control staphylococcal endocarditis and that this failure is due only to lack of penetration into the depths of valvular vegetations. But the point which we are trying to make is that there are degrees of failure; there is a significant difference between an antibiotic which fails to cure yet prevents progression of the disease, and one which has no influence on the course of the infection. The former at least allows time for a bactericidal combination of antibiotics to be found; upon this concept rests the whole basis of the successful treatment of bacterial endocarditis.

In assessing the activity of an antibiotic in vivo certain criteria should be met. Firstly, the infection should be due to a single bacterial species. It is not uncommon, for example, for a case of pneumonia of mixed aetiology to be labelled as staphylococcal, since this organism is easily identified in mixed culture and has achieved notoriety in the context of hospital cross-infection. A broad-spectrum antibiotic successful in such a case may not prove adequate in the treatment of a true staphylococcal pneumonia. Secondly, the infection should be severe and the response unequivocal. Thirdly, the antibiotic should be used alone.

The papers quoted by Drs. Foord and Snell as evidence of the response to cephaloridine of penicillinase-producing staphylococci hardly satisfy these conditions. The first¹ referred only to minor infections; the second² reported five cases as responding to cephaloridine, but of these three also received initially simultaneous streptomycin; in the third³ some of the six cases of soft-tissue infections referred to were of mixed aetiology, and the result of treatment was not clearly reported.

Wider clinical experience of cephaloridine will be necessary to establish its true value, but its usefulness against penicillin-resistant staphylococci is limited severely because it is much less active against some strains than others. It is of no value against high penicillinase-producers, which rapidly destroy it; unfortunately the identification of such

strains is beyond the scope of the routine laboratory.

It is for this reason that we feel that cephaloridine cannot be regarded as a wise choice for the treatment of severe infections due to penicillin-resistant staphylococci.—We are, etc.,

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Driving and the Heart Rate

SIR,—I was interested in this preliminary communication (18 February, p. 411) recording doubling of the heart rate without noticeable palpitation in young healthy drivers in London traffic with conspicuous ST-T changes which were not due to the tachycardia itself. The even more marked similar findings in three healthy experienced racing drivers further underline the importance of such recordings.

The influence of fear on the electrocardiograms was long known,¹ and ST-T changes were repeatedly produced in anxiety states of patients aware of their anxieties,^{2,3} or in anginal attacks provoked by emotional upheavals,⁴ or by vehement discussions⁵ and examinations.⁶ In emotional states connected with anxiety⁷ noradrenaline is discharged from the cardiac sympathetic terminals,⁸ possibly as a result of cortical or hypothalamic stimulation impairing the cardiovascular function.⁹ There is evidence for the chemical origin of the ST-T changes in angina pectoris¹⁰ as well as for adrenergic neurosecretory overactivity in the anginal syndrome.¹¹

The great importance of this preliminary communication appears to be that the subjects were not aware of any strain, and that the electrocardiographic changes were quickly reversed by "tranquillity." Ischaemic heart disease as encountered at the bedside is only the end-product of several pathological processes, and of often unnoticed trauma inflicted by living in our Western civilization. The recognition of these non-apparent traumata is of the greatest importance in the elucidation of the genesis of atherosclerotic heart disease.^{12,13}

There is every reason to believe that man is as yet unable to adapt himself to the pace of present-day Western civilization. Wherever this penetrates in force an epidemic of atherosclerotic heart disease follows. The vicious circle consists mainly in the availability of too much, too concentrated, less bulky food, of rapidly increasing replacement of personal efforts by automation, lack of physical exercise, and taking of drugs (alcohol, nicotine, tranquillizers). This "sophisticated" way of life changes the homeostasis of the hypothalamic centres, enhances stagnation, produces boredom, frustration, pleasures which are merely diverting and not satisfying, lack of higher values and stability, which in turn cause more anxiety and tension. In our competitive society this is termed "stress and

strain," and this greatly contributes to the development of hyperlipidaemia, obesity, to systemic adrenergic stimulation, diminishing myocardial efficiency causing extensive arterial changes, and possibly alteration of the clotting mechanism.—I am, etc.,

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Selective Thymic Venography

SIR,—I was interested to read Dr. L. Kreef's account (18 February, p. 406) of his elegant method of visualizing the thymus by venography. It brought to mind some experiments which Dr. T. A. Grimson and I performed some 10 or more years ago in which, at operations by Mr. G. A. Mason and Mr. S. G. Griffin on the thymus for myasthenia gravis, we passed with the surgeon's help the tip of an ordinary No. 6 Cournand cardiac catheter into the mouth of the thymic vein. The object was to try to obtain venous blood direct from the gland and test it for a paralyzing effect on a neuromuscular preparation, on the thesis that the gland might be an endocrine organ with a curare-like secretion. We were successful in obtaining the blood but not in demonstrating any curare-like effect from it.

The vein was easily identified by the surgeons who guided the catheter tip into it, but it would not go far. Dr. Kreef has called it "the great vein of Keynes." I would favour the "little vein of the great Keynes."—I am, etc.,

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Referring the Patient

SIR,—While I agree in general with the opinions expressed by Dr. N. Rosendale in his letter (11 February, p. 361) on the subject of patients attending venereal disease clinics, it is difficult to see how any practical improvement in the situation can be obtained. There can be no doubt that ideally all patients attending clinics should be referred in the first instance by their family doctors. The plain fact of the matter is that a very considerable number of patients will not consent to this. If they are unable to attend clinics without prior consultation with their general practitioner there will be many who will seek