Correspondence

Letters to the Editor should not exceed 500 words.

Cine-angiography of the Mitral Valve

SIR,—At some time in our lives all of us have enjoyed the films, and one of the intense pleasures of modern cardiology is sitting at ease in an armchair examining the function of the mitral valve in the manner described in your leading article (4 June, p. 1377). However, it is dangerous to assume that the cardiologist's enthusiasm for the movies justifies his abandoning the older, simpler, and safer measures for the newer, more expensive, and most dangerous.

Naturally occurring cases of advanced rheumatic mitral disease—that is, those not previously submitted to surgical treatment—show the features of one of three syndromes. In the obstructive syndrome, amenable to treatment by valvotomy without perfusion, the diastolic murmur rumbles through diastole without varying much in loudness from its beginning at the time of mitral opening to its ending in the next cardiac cycle. Third heart sounds do not occur. The apex of the left ventricle moves the chest wall outwards slowly in diastole. Stasis waves are absent from the left atrial pressure pulse that may be obtained with relative ease and safety by Ross's technique of atrial septal puncture. The presence and magnitude of the opening snap depend upon the mobility of the central part of the aortic leaflet, and not upon the size of the mitral orifice.

In the syndrome of severe incompetence, the diastolic murmur begins with loud vibrations at the time of the third heart sound,¹ and it wanes as the left ventricular filling pressure gradient disappears in the period of stasis. Third heart sounds are loud, and accompanied by a palpable shock. The apex of the left ventricle moves the chest wall rapidly outwards to a peak at the time of the third heart sound, and this characteristic movement is not disturbed by the coexistence of aortic valvar disease or hypertension; indeed, it is enhanced by these factors, which increase the severity of the regurgitation. Nor is it true to suggest that studies of apical motion are "insensitive and may be misleading" when suitable apparatus is employed. An opening snap is usually present in these cases, and it indicates that the aortic leaflet is sufficiently mobile to permit the valve to be repaired.

A minority of advanced rheumatic cases present with a mixture of serious obstruction and regurgitation. Valvotomy worsens the condition by separating the cusps and permitting serious regurgitation; and rigidity of the valve tissue precludes reparative operations. The physical signs of this syndrome are characteristic. These points have been made by various authors and are reviewed in recent publications.²⁻⁴

It must be admitted that the physiological techniques employed for diagnosis—namely, phonocardiography and apex-motion record-

ing—require a higher degree of craftsmanship than left ventricular cine-angiography, but on the other hand they can be employed in the outpatient department or consulting-room; they do not require the patient to be admitted to hospital; they neither require the assistance of radiologist and radiographer nor enormous capital outlay. The experience of working in a surgical unit where the chief interest is mitral disease suggests that the diagnostic accuracy of the techniques may not lag far behind cine-angiography.

May I ask the author of your leading article if he has any evidence that will allow us to weigh the morbidity and mortality from "the direct and uncomplicated" left ventricular cine-angiography against the risks of phonocardiography and heart-pulsation recording?

With regard to left atrial myxoma, the diagnosis may be suspected from the history and the systemic disturbances, and then, for safety, an angiocardigram is performed with injection of contrast medium into the pulmonary artery. Injection into the left atrium may cause the friable tumour to disintegrate.

At present there is great interest in mitral incompetence caused by disease of the papillary muscles and chordae, where "untethering" of the aortic leaflet may prevent the development of the third heart sound reaction. In rheumatic disease the phonocardiogram and apex recording may be difficult to interpret where inadequate surgical treatment has modified the natural development of physical signs. It is in these areas that cine-angiography has the most to offer just now, but its contributions will have relatively little value if they are unaccompanied by the studies of the heart sounds and pulsations that in turn will enable us to make accurate diagnoses at the bedside.—I am, etc.,

Charing Cross Hospital,
London W.C.2.

P. G. F. NIXON.

REFERENCES

- ¹ Coombs, C. F., *Rheumatic Heart Disease*, 1924. Bristol.
- ² Nixon, P. G. F., and Wooler, G. H., *Brit. med. J.*, 1960, 2, 1122.
- ³ ———, *Brit. Heart J.*, 1963, 25, 393.
- ⁴ ———, *Postgrad. med. J.*, 1964, 40, 136.

Muscular Pain During Therapy with Carbenoxolone (Biogastrone)

SIR,—We have recently observed what appears to be an unrecorded toxic effect of carbenoxolone (Biogastrone).

A 43-year-old shoe-shop manager was admitted on 8 September 1965 on account of haematemesis, and was found to have both a duodenal ulcer and a large lesser-curve gastric ulcer. He was transfused, 1 litre of whole blood being

given. On 15 September he started treatment with carbenoxolone, 100 mg. thrice daily, and ferrous sulphate, and was discharged on this treatment, together with an ulcer diet.

On 30 October he first noticed stiffness and cramp-like pain in the left side of the neck and the left upper arm, and later in the left thigh and calf. During the next 14 days the stiffness and pain increased in severity, involving the right side of the neck, the right upper arm, and then the right calf and thigh. The pain was disabling, kept him awake at night, and made movement of the arms difficult. On examination the muscles were tender but there was no obvious induration. There were no signs to suggest peripheral neuritis, and no change in the colour of the urine was noted. He had never previously had such symptoms. He was given first paracetamol, 1 g. four times daily, and later dihydrocodeine bitartrate, 60 mg. thrice daily. The dose of carbenoxolone was reduced to 50 mg. three times daily on 14 November, and the drug was finally stopped on 20 November. Two days later the pain began to subside.

Electromyograms recorded on 6 December from areas of residual tenderness in the right deltoid and brachioradialis muscles were compatible with myositis, showing an excess of polyphasic potentials of normal or short duration, some containing spike-like potentials. On 7 December a biopsy was taken from the right deltoid muscle and showed no histological abnormality.

The clinical features and the electromyograms were suggestive of myositis, but unfortunately the biopsy was not taken until recovery was almost complete. The prompt and sustained remission which followed the withdrawal of carbenoxolone suggests that the symptoms may have been related to treatment with the drug.—We are, etc.,

T. N. MORGAN.

I. DONALD.

G. M. McANDREW.

Aberdeen Royal Infirmary,
Aberdeen.

Lysergic Acid Diethylamide

SIR,—As one who has used L.S.D. in the field of medical psychotherapy since 1954, I should like to comment on your leading article "The Effects of L.S.D." (18 June, p. 1495) and on Mr. J. P. Christen's reply to Dr. S. E. Browne (p. 1540).

It has been clear for some years that the use of L.S.D. in the United States by non-medical workers coupled with the increase of self-experimentation and the interest shown in the drug by quasi-religious groups must sooner or later be followed by similar phenomena in England. This has probably now happened, but in a less dramatic way and on a smaller scale than has occurred in America.

It must be borne in mind that L.S.D. has been used in many countries for a number of years without serious social consequences, and the recent use of hallucinogens obtained from "black market" sources must be seen in conjunction with the steep rise in the numbers of those taking drugs of addiction.

Although it may rightly be held that L.S.D. is not a drug of addiction it appears to find favour with those who are actual or potential addicts. For this reason, we cannot always be sure that those who are taking L.S.D. under non-medical supervision or without supervision at all are not taking others drugs as well. My own observations show that amphetamines and amphetamine-like substances can cause a reappearance of hallucinatory phenomena in an acute form certainly some days and possibly some weeks after the administration of L.S.D.

The oft repeated twin dangers which may follow the use of L.S.D.—namely, suicide and psychosis—occur less frequently in skilled hands and more frequently in unstable individuals under inadequate psychiatric supervision. Lest this matter should get out of proportion, it is within the experience of most medical psychotherapists that both suicide and psychosis are possible complications of many forms of psychotherapy, including group therapy, when no drugs are being used. It cannot be emphasized too strongly that the administration of L.S.D. by one person to another constitutes a psychotherapeutic transaction, and unless the giver is competent to handle the subsequent emotional changes in the recipient he should not embark on the experiment. By competent I mean not only in the psychodynamic field, but he should also possess a thorough knowledge of the pharmacological effects of hallucinogenic drugs and of their antidotes and excitants.

I therefore feel that this is the moment not so much to emphasize the dramatic side of L.S.D., as your leader has tended to do, but to stress the unquestioned benefit to many patients that has been wrought by therapists in this country using L.S.D. over the past 10 years or more. I was indeed surprised that Mr. Christen believes that "very little L.S.D. has, in fact, been used in the United Kingdom." For some eight years now the L.S.D. unit at Powick Hospital, Worcester, has been in almost continuous use treating upwards of five patients a day. Evidence that many other psychiatrists in the United Kingdom have been treating quite large numbers of patients was presented to a two-day conference on the psychotherapeutic use of L.S.D. held in London by the Royal Medico-Psychological Association in 1961 and reported in a monograph of the same title.¹ I have recently received many letters from psychotherapists who are deeply concerned about the action taken by Sandoz, and I would personally support a system of distribution of L.S.D. to competent medical men through such a body as the Royal Medico-Psychological Association.

Fashions change in psychiatry, but so far the use of L.S.D. as an adjunct to psychotherapy is standing up to the test of time. May I state my entire agreement with your leader that "The consensus of those psychiatrists who have found the drug a useful adjunct to psychotherapy is that it benefits patients with character disorders and those suffering from sexual perversions and obsessional neuroses." Since there is little else that psychiatry has to offer in the long term for these patients let us hope that the use of L.S.D. in psychotherapy will survive the present threats. The biggest of these at present is that L.S.D. is not "respectable." But let us remember that Freud was certainly not "respectable" in his day, and hope that

future clinical practice and research in the field of L.S.D. will continue to support it as an ethical and "respectable" drug in the proper hands.—I am, etc.,

Knowle Hospital. R. A. SANDISON.
Fareham, Hants.

REFERENCE

- ¹ *Hallucinogenic Drugs and their Psychotherapeutic Use*, 1963. London.

SIR,—In his letter (18 June, p. 1539) replying to Dr. S. E. Browne, Mr. J. P. Christen, Managing Director of Sandoz Products Ltd., fails to justify his company's action in withdrawing lysergic acid diethylamide from responsible practitioners who have been using this drug with the active cooperation of Sandoz for a number of years. Dr. R. A. Sandison introduced L.S.D.-25 to this hospital in 1952 (not 1954 as mentioned by Mr. Christen), and the drug has been in regular use here since that time. Messrs. Sandoz made us a research grant of £3,000, and in 1958 a purpose-built L.S.D. Unit was opened at a cost of £10,000.

At the present time I have 20 patients on treatment and I find no arguments in Mr. Christen's letter which justify the withdrawal without notice of a drug which his company has supplied to us without question for 14 years.

Mr. Christen's main argument seems to be that the good name of his company is being impugned by its association with L.S.D., while at the same time he acknowledges that very little L.S.D.-25 has been used in the United Kingdom and that its distribution has been limited essentially to psychiatrists working in recognized psychiatric institutions and to certain basic research workers. I feel that Sandoz's action in withdrawing the drug without notice and without regard to the condition of the patients on treatment is itself highly unethical. It would surely have been possible for psychiatrists, who have been using the drug for long periods, to have been afforded adequate stocks to tide them over until alternative sources of supply could be arranged. This would have enabled patients to complete their treatment and the good name of the House of Sandoz would have been preserved, whereas one feels that it has now been damaged, not perhaps in the eyes of the public but in the eyes of the profession, who have been treated in such a cavalier and surely unprecedented manner.—I am, etc.,

Powick Hospital,
Near Worcester.

A. M. SPENCER.

SIR,—For over four and a half years we have been using L.S.D. therapy, and I myself consider this to be a very valuable form of treatment. We have treated 581 cases which needed 2,742 treatment days, and our results are satisfactory.

I do not consider L.S.D. to be a "miracle" drug, but certainly consider its assistance immensely valuable in certain forms of psychiatric illness. I have seen no cases of psychosis, either permanent or temporary, though all cases went through extreme or minimal amounts of emotional disturbance. There were no cases of suicidal attempts, and at no time did any patient produce any bizarre

behaviour which was beyond our control. We have not yet seen any case who showed signs of drug addiction and none had ever considered it for a "kick."

I was surprised to read Mr. J. P. Christen's letter (18 June, p. 1540) stating that the drug is not generally accepted, and therefore they will withhold it. I would like to ask him when has any form of new treatment ever been universally accepted in the history of British medicine?—I am, etc.,

B. BHATTACHARYA.

Carlton Hayes Hospital,
Narborough, Nr. Leicester.

SIR,—In my letter on lysergic acid (18 June, p. 1539) I suggested that it should be available to the profession, not to each and every doctor; I refer patients only to therapists with analytic training and long experience of using this drug. As a practitioner in a working-class area L.S.D. therapy is the only form of psychotherapy I consider financially possible for my patients, and access to it is now becoming difficult because no one seems to know where in fact legitimate supplies can be obtained.

Some patients being treated with lysergic acid are, in fact, fighting for their lives; treatment has already been stopped of patients who were responding very well to lysergic acid after all possible forms of physical therapy had failed. It would, in my opinion, have been more ethical to attempt to negotiate a suitable control system before cutting off supplies.

I would suggest to Sandoz that it would be a generous and more characteristic gesture for them to restore L.S.D. supplies while adequate controls are being worked out.

What seems to me an extraordinary state of affairs is that any doctor can (and some still do) prescribe amphetamines, the use of which is therapeutically unjustifiable because of the danger of addiction and psychosis, while a potentially life-saving drug is withdrawn.—I am, etc.,

Hornchurch.

S. E. BROWNE.

Insanity of King George III

SIR,—I have read with great interest the article by Drs. Ida Macalpine and Richard Hunter on "The Insanity of King George III; a Classic Case of Porphyria" (8 January, p. 65).

In the notes on King George III's disease collected and presented with such care by the authors of this article we find the cardinal signs of acute porphyria—abdominal pain, weakness and pain in the legs, severe muscular emaciation, dark urine, progressing by successive attacks. All the neurological signs of intermittent porphyria, together with attacks of mental disturbance, strongly confirm the diagnosis.

In my opinion this is the first known observation of acute porphyria, and we must be grateful to the authors for their remarkable study.

May I remind your readers that, so far as I know, the first description of the nervous manifestations of porphyria with abdominal and nervous signs—paralysis, mental disturbances, and dark urine containing a pigment