up to 48 hours after the infarction, less than 10 per cent of myocardial infarct patients still have increases 96 hours after the infarct (4). There is no indication in the report of Loebel and Robins that they studied recent onset acute patients.

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HALOPERIDOL IN THE TREATMENT OF STUTTERERS

DEAR SIR,

Having read the letter from P. T. Quinn and E. C. Peachey, University of New South Wales, Australia, on haloperidol in the treatment of stutterers (1), we would like to convey some further information.

We have followed-up nine of the 12 patients who originally received haloperidol in our trial (2). More than three years after haloperidol was taken, it was found that fluency alone remained significantly improved; the other two measures, repetitions and interjections, though much improved failed to show significance or improvement.

Side effects were a serious problem: orphenadrine controlled extrapyramidal side effects but depression and drowsiness occurred in more than half the patients. The abrupt withdrawal of medication brought about some subjective and objective worsening and the question of maintenance therapy needs to be considered further.

Imipramine taken with haloperidol reduces its efficacy but subsequently the value of flupenthixol has been explored, producing good results with minimal side effects.

It seems highly likely that the more severely handicapped, i.e. those who are slow and show tic-like movements, may have some biochemical lesion in the basal ganglia (3); this would account for their response to haloperidol and flupenthixol. To clarify this we are shortly undertaking a double-blind cross-over trial of diazepam and flupenthixol.

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TARDIVE DYSKINESIA

DEAR SIR,

We should like to comment on Dr. George M. Simpson's letter on the subject of tardive dyskinesia published in the *Journal*, May 1973, **122**, 618.

Recently a survey has been carried out of all psychogeriatric patients (aged 65 and above) at the St. Louis State Hospital to study the incidence of tardive dyskinesia and drug-induced neurological syndromes. In all, 160 patients were studied of whom 35 patients were noted to have tardive dyskinesia. In view of Dr. Simpson's interesting observation that female patients with Eastern European Jewish background may be more liable to develop tardive dyskinesia when exposed to neuroleptics, we studied the ancestry of our 35 patients of whom 30 were females and 5 males. Only 2 were Jewish (1 male and 1 female), 31 patients were Caucasian, 1 Chinese and 2 Negroes. Of the Caucasian patients 1 was of Austrian descent (female), 1 of Polish descent (female), 3 of Irish descent (1 male, 2 females), 1 of Italian descent (male), 2 of German descent (both females), 1 of English descent (female), 1 of Russian descent (male), 1 of Bohemian descent (female). The rest of the patients were third or fourth generation Americans born in the United States, and no detailed information of their ancestry was available. Taking into

account the sort of population we serve in the catchment area of St. Louis State Hospital, we did not find any excess of patients of Eastern European Jewish background with tardive dyskinesia. The vast majority of the patients were of course female, elderly, organically impaired and edentulous, and had had long-term phenothiazine therapy.

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A DOUBLE BLIND TRIAL OF PHENELZINE AND AMITRIPTYLINE IN DEPRESSED OUT-PATIENTS

DEAR SIR,

It seems important to make a comment on the paper by Kay, Garside and Fahy (*Journal*, July 1973, **123**. 63–7).

It is curious, and highly unfortunate, that the design of this interesting informative trial gave it an inevitable handicap against phenelzine. It is difficult to equate comparate doses of different drugs, and one way might be to establish the relative doses which produce the same proportion of therapeutic successes; another criterion of comparable dose might be the incidence of side-effects. On both of these premises, it is clear that the doses of phenelzine used in the trial were too low. It is stated in the paper that the dose used was between 15 mgm. and 45 mgm. a day 'according to the discretion of the consultants'. The former is, to say the least, a cheeseparing dose! There are ample published reports to show that 45 mgm. per day is usually the minimum, and that many patients who show no response to this level improve on double this dose. It has been my own experience, in extensive use of the MAOI drugs, that in contrast to other groups of drugs the dose used is rather critical and must be carefully adjusted for each patient, so that a difference of 1 or 2 tablets per day can turn dismal failure into remarkable success.

This seems to be confirmed by Ian Oswald (*J. Int. Med. Res.*, 1973, **1**, 296) who states 'In the case of the MAOIs there is a critical dose phenomenon, and only if a critical dose is exceeded does REM sleep suppression occur'. He adds that in those patients with endogenous depression who respond to phenelzine the delay in effect on REM sleep coincides with that on mood response.

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BURDEN RESEARCH MEDAL AND PRIZE

DEAR SIR,

Entry for the Burden Research Medal and Prize is open to all registered medical practitioners who are working in the field of mental subnormality in the United Kingdom or Republic of Ireland.

The award for 1974, total value £250, may be presented at Stoke Park Hospital on or about 1 April 1974, for outstanding research work which has been published, accepted for publication or presented as a paper to a learned society during the three year period ending 31 December 1973.

Five copies of the paper or papers, with application form, should be submitted to the Secretary of the Burden Trust by 10 January 1974.

Further information and application forms are available from the Secretary, Burden Trust, 16 Orchard Street, Bristol, BS1 5EA.

W. A. HEATON-WARD.