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MYASTHENIA GRAVIS AND SCHIZOPHRENIA

DEAR SIR,

Having read the interesting paper by Drs. Gittleson and Richardson (*Journal*, March 1973, **122**, 343-4) I thought it might be worth while to report another such case.

Mrs. I.P. was born in Dortmund, Germany, in 1937.

Family history. Her father died during the war. He suffered from a 'nervous illness' of which no details are known. Her mother has been well; she remarried and the patient has two step-sisters.

Personal history. She had an uneventful childhood and left school at 15. She worked as a shop assistant and married, aged 19, a British national serviceman stationed in Germany. They came to England in 1957, separated in 1962, and later divorced. There were no children.

Past psychiatric history. In 1954 at the age of 16 the patient was admitted to a psychiatric hospital in Germany suffering from auditory hallucinations and paranoid delusions and was diagnosed as having paranoid schizophrenia. She was treated with ECT, drugs and 'fever therapy' and recovered.

History of present illness. In December 1963 she began to notice nasal regurgitation, slurring of speech and general weakness. In March 1964 she was admitted to St. Mary Abbots Hospital, Kensington London, diagnosed as having myasthenia gravis and was treated with neostigmine and pyridostigmine. She was also noted to be pregnant. Soon after her discharge she was readmitted with a spontaneous abortion and within a week she became auditorily hallucinated. She was transferred to the National Hospital, Queen Square, where she expressed the belief that people were trying to control her and were able to read her thoughts. She was investigated, and LE cells were found on one occasion, but this was not confirmed. She was treated with phenothiazines and recovered in the course of a month.

In July 1964 she had a thymectomy at the Middlesex Hospital but continued to require neostigmine and pyridostigmine. From then until 1970, when she returned to Germany, she was admitted to the Middlesex Hospital rather more than once a year because of her severe myasthenic symptoms, which were poorly controlled. These were difficulty in chewing and swallowing; slurring of speech; impaired grip with a tendency to drop things; weakness of the back and legs; and back pain. Signs noted were bilateral ptosis, weakness of palate, face and jaw and general wasting and weakness of the musculature of trunk, arms and legs.

In 1967, 1968 and 1970 she was admitted to the Middlesex Psychiatric Unit at Woodside Hospital with florid psychotic symptoms. On the first two occasions she was transferred from the neurological ward, where she had been admitted because of an exacerbation of her myasthenic symptoms. In 1967 she was hallucinated, with accusatory voices; she felt that electricity was playing on her and she misidentified people. In 1968 she was restless, agitated and at times disorientated; she was deluded and auditorily hallucinated and her mood was labile and incongruous. In 1970 she was found to be disturbed, thought-disordered and expressing delusional ideas. On each occasion she was treated with chlorpromazine and trifluoperazine and she settled down after periods in hospital of 2 months, 4 months and 3 months. After her recovery in 1967 she again became pregnant and she had an uneventful therapeutic abortion.

It is of interest that after her mental state had improved in 1970 she developed an arthropathy and a pericardial rub indicating active disseminated lupus erythematosus, and she was treated with azothiaprine.

In Germany her psychotic symptoms have recently been attributed to an ephedrine psychosis. In 1967 and 1968 she was taking ephedrine 30 mg. t.d.s. and atropine 0.6 mg. t.d.s. but she was not taking any in 1964 or 1970 and her first psychotic illness occurred ten years before the onset of myasthenia.

I do not think there can be much doubt that the psychiatric diagnosis was a recurrent schizophrenic reaction to the stress of severe myasthenia (associated here with DLE) in an individual shown by her illness at 16 to be predisposed to this form of psychosis.

I should like to thank Dr. Michael Kremer and Dr. J. A. Hobson for permission to report this case. W. DORRELL.

The Middlesex Hospital Department of Psychological Medicine, Cleveland Street, London W1.

DICHOTOMOUS THOUGHT PROCESSES IN ACCIDENT-PRONE DRIVERS

DEAR SIR,

I read the paper on accident-prone drivers by Plummer and Das (*Journal*, March 1973, 122, 289), with considerable interest, but doubt whether this study supports their conclusions. My main criticism rests on the composition of their groups and the concept of accident proneness.

It is well known that young drivers aged between 17 and 25 have higher than average accident rates; that men greatly outnumber women in this kind of misfortune; and that the hazards for young motor cyclists are very much greater than those to which car drivers are exposed. The control group in this study contained rather more women and had a mean age five years greater than the experimental group; and five of the experimental group, but only one of the control group, rode motor cycles. On epidemiological grounds one would expect the experimental group to have more accidents in the year preceding the study and these might be independent of any differences found in their responses to psychological questionnaires.

The concept of accident proneness is fraught with difficulties, but one thing is generally agreed: when comparing groups for frequency of accidents precise matching in terms of distances driven during the period of observation and the hazardousness of the environment to which they are exposed is essential. The authors claim that the groups 'did not differ in frequency of exposure to driving hazards'. How did they know? Did they examine the routes driven by all 60 drivers and estimate the quality and frequency of the hazards encountered? The fact that all the drivers used their vehicles with approximately equal frequency does not imply the conclusion that the distances driven and the complexities of the routes were equally similar. Admittedly, environmental hazard is not the whole of the story, and it will readily be conceded that the personality qualities of drivers are all-important in determining how they will cope with the dangers. However, as far as this study is concerned it would be rash to conclude that the experimental group were more accident-prone than the control group; they certainly had more accidents -and this term needs more precise definition-but this may have been because they were younger, less experienced and more frequently rode motor cycles.

It would be interesting to know whether the responses to the semantic differential test change with age, and whether an older group of subjects, showing differences on the test of the kind observed in this paper, would continue to have more driving accidents. On commonsense grounds one might have anticipated greater scores in potency and activity in the younger experimental group, particularly those who rode motor cycles. It was interesting to note the marked similarities in response of those in both groups whose scores were at zero and at the extremes (Category 1). Were those in the control group (No Accidents) who showed this 'profile' younger, more often male, and more likely to ride motor cycles?

One final point needs to be made. It would not be appropriate to compare the authors' groups with those studied by Selzer and Payne for the presence of suicidal thoughts. The American study was concerned particularly with suicidal acts and thoughts in alcoholic and non-alcoholic patients. The alcoholics had the highest number of accidents, suicidal thoughts and suicidal acts. One has to presume that Psychology I students in Sydney had not yet attained the diagnostic status of alcoholic.

F. A. WHITLOCK.

University Department of Psychological Medicine, Clinical Sciences Building, Royal Brisbane Hospital, Herston, Queensland 4029, Australia.

DAY HOSPITALS' FUNCTION IN A MENTAL HEALTH SERVICE

DEAR SIR,

As Dr. Morrice (Journal, March 1973, 122, 307-14) points out, it is difficult to assess the results of the operation of the various species of day hospitals which have sprung up over recent years. Borne in on a tide of uncritical enthusiasm, their multiplicity is matched only by the relative paucity of factual information on what they actually achieve. It is disappointing, therefore, that Dr. Morrice, interesting and valuable though his results are, was not able to follow up more than 53 of his 139 patients over the fairly short period of three months, and that only clinical assessment (by what means is not precisely clear) was carried out, other modes, e.g. families', general practitioners' and patients' own assessments, being ignored. We attempted to ascertain the impact of a day hospital (Carney, Ferguson and Sheffield, 1970) very similar to Dr. Morrice's at 12-18 months, follow-up on these and other interested parties, with some unexpected results. We found a more favourable outcome as judged by the patient and his family (despite the considerable burden imposed by the patient's condition) than by the clinical method of assessment, with which their ratings correlated rather poorly. Moreover, none of these assessments bore much relationship to the generally unfavourable judgments of the general practitioners, which, unlike those of the families, were apparently unduly influenced by the burden imposed by these patients in the shape of calls and consultations. Yet Dr. Morrice is evidently not insensitive to the needs of these other users of the service, since he lays emphasis on the interaction between the patient and the community.

We are also somewhat puzzled by the apparent contradiction between his conclusion that a wider range of patients can be catered for than at present, and his statement that his own initial criteria were over-expensive, certain numerous categories of patient —those with personality and character disorders exerting a disruptive influence (and apparently not doing as well as some other patients thought to have a poor prognosis). As Dr. Morrice indicates, active day hospitals and staff are scarce commodities; so it