understand that insomnia has already emerged as a significant complication with it. Also, Dr. Carney doesn't state which form of fluphenazine his figures relate to, and I think it is generally accepted that the decanoate shows a significantly lower rate of troublesome side effects than the enanthate.

Willingness to co-operate in a long-term treatment programme of this kind involves many issues, which go far beyond the actual pharmacological effects of the medication prescribed. Success depends to a large extent on managerial and information systems, which are at present still in their infancy. The Department of Health and Social Security has recently approved a research grant for a system of continuous monitoring to be developed in this area for vulnerable schizophrenics. I am sure that with further development in this direction pharmacological side effects will be seen in better proportion and will be found to be of much less overall significance than Dr. Carney has suggested.

H. L. Freeman.

Hope Hospital,
Eccles Old Road,
Salford, M6 8HD,
Lancs.

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INTRAVENOUS DIAZEPAM IN DRUG-INDUCED DYSTONIC REACTIONS

Dear Sir,

In their recent paper under this title, Korczyn and Goldberg (*Journal*, July 1972, **121**, 75–77) speculated that *oral* diazepam might be an effective prophylaxis against the development of such reactions. We wish to report on the effect of intravenous and oral diazepam in a patient with a chronic movement disorder.

The patient is a 56-year-old Caucasian man who developed choreoathetotic movements in his right wrist in February 1970. Within six months the movements spread to his right arm, neck and face. The patient became bedridden and could not feed himself. The movements were not present during sleep. It was found that massage of his right temple would completely remove the movements; and so, in September 1970, he was started on thioridazine, 150 mg. by mouth each day, and benztropin, 2 mg. by mouth daily in divided doses. The movements had stopped at the time of his next clinic visit in December 1970, and he was returned to the care of his family physician.

In January 1971, chlorpromazine, 200 mg. by mouth in divided doses each day, was substituted for thioridazine by his physician. The abnormal movements gradually recurred, and progressed in severity over the next 2½ years. He was referred back to this hospital in July 1972. On admission he had marked head bobbing, a large amount of facial grimacing, and choreoathetotic movements in his left arm and both legs. Chlorpromazine and benztropin by mouth were discontinued. Phenobarbital, 60 mg. by mouth each day, had no effect on the movements. Benztropin, 2 mg. i.v., had no effect either.

In preparation for a pneumoencephalogram, the patient was given diazepam, 5 mg. i.v. His movements stopped as he went to sleep and remained markedly decreased on awakening. For 24 hours the patient was able to sit and feed himself unassisted. However, the movement disorder returned after that time. Diazepam by mouth, in a dose ranging from 10 to 30 mg. per day over a 10-day period, had no further beneficial effect.

Bianchine and Bianchine (1970) noted an immediate cessation of torticollis after i.v. diazepam in a patient unaffected by i.v. diphenhydramine. This effect lasted several hours at most in their patient, but was reproduceable. Long-term benefit was afforded by oral diazepam in a modest dose. High dose of oral diazepam led to significant improvement in one patient with dystonia musculorum deformans, in whom a single i.v. dose produced a dramatic change lasting a few days (Keats, 1963). However, other workers have not been impressed by any long-term benefit from oral diazepam in this chronic movement disorder (Barrett *et al.*, 1970; Chase, 1970).

William Heffron.

Michael P. McQuillen.

Department of Neurology,
University of Kentucky Medical Center,
Lexington, Kentucky 40506, U.S.A.

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