methonium can occur with smaller initial and second doses than they found, and (b) the period of asystole can be prolonged beyond 7 seconds. Bullough originally reported arrest of "up to 16 seconds or even more."

The progressive depression of the P-wave suggested that the site of action might be direct on the atrial myocardium, and this, in conjunction with the work of McKendrick and Godfrey<sup>2</sup> on biochemical initiation of the cardiac impulse, led to some work on isolated rabbit atria in vitro. Unfortunately, this work was interrupted by my return to England and was never completed. No effect had been demonstrated. However, as all the apparatus was home-made and definitely makeshift, this method may yet provide further information. This work also suggests that intermittent suxamethonium may be more dangerous in patients on "serpasil"—with depleted tissue sympathomimetics—or any form of relatively increased vagal tone.

I now give intravenous atropine routinely to all patients requiring more one than dose suxamethonium.—I am, etc.,

University College Hospital, London W.C.1.

B. Foster.

## REFERENCES

<sup>1</sup> Bullough, J., *Brit. med. J.*, 1959, 1, 786. <sup>2</sup> McKendrick, C. S., and Godfrey, A. M., *Lancet*, 1959, 2, 482.

## Benzhexol Hydrochloride Poisoning

SIR,—Benzhexol hydrochloride has been used in this country for the treatment of Parkinsonism since 1949. It reduces the rigidity and tremors, and controls sialorrhoea. Cunningham et al.1 found that its antispasmodic effects on isolated intestinal muscle were half as powerful as that of atropine. They found that in small doses the parasympatholytic effects were accompanied by mild depression of the central nervous system, and in larger doses by excitement. Although the side-effects of benzhexol hydrochloride used in the treatment of Parkinsonism have been recognized for a number of years, no case of acute poisoning with this drug has been recorded in recent medical literature. I would like to describe such a case.

47-year-old married woman had encephalitis lethargica in 1924 at the age of 11, and developed Parkinsonism at the age of 32, and was regularly attending the out-patient department of this hospital. She was noted to have a typical Parkinsonian coarse tremor, cog-wheel type of rigidity of all limbs, and had been very troubled by oculogyric crises occurring about once weekly. The patient usually took about 10 mg. of benzhexol hydrochloride daily in divided doses. The insidious progression of the disease and the lack of dramatic response to the drug was causing her to become increasingly despondent, and in such a period of severe depression she took about 15 tablets (75 mg.) of benzhexol hydrochloride in an attempt to commit suicide.

When she was admitted on October 21, 1960, about two and a half hours after taking this overdose, she was found to be confused and agitated. She had well-formed visual and auditory hallucinations in which she saw "dead men hanging from curtain bars, and heard someone telling her that her husband and son had been murdered." She had a painfully dry tongue and mouth. The widely dilated pupils reacted very sluggishly to light. She had a coarse horizontal nystagmus on looking to the right and left and intention tremor in the upper extremities. We were surprised to find the complete disappearance of her previously marked rigidity and Parkinsonian tremor in all the four limbs.

The patient was treated with gastric lavage only. The mental changes, the nystagmus, and the intention tremor disappeared, and the rigidity and Parkinsonian tremor

reappeared 24 hours after admission to the hospital. On complete recovery the patient was found to be a sensible person and had no obvious psychotic tendencies.

This case shows that large doses of benzhexol hydrochloride can cause acute psychosis. Serious reactions first reported in four cases by Corbin<sup>2</sup> were acute mental confusion, extreme agitation, and dizziness. Porteous and Ross later<sup>3</sup> described similar psychotic symptoms in their article on mental symptoms following the use of benzhexol hydrochloride in Parkinsonism. The patient's slurred speech, nystagmus, and intention tremor point to cerebellar disturbance, and this has not previously been noted with benzhexol hydrochloride. The other notable feature in this case was the complete temporary disappearance of extrapyramidal tremor and rigidity. It is interesting that, apart from cerebellar signs, similar toxic effects are encountered with atropine overdose.

I wish to thank Dr. D. R. Humphreys, consultant physician, United Birmingham Hospitals, for permission to report this case and also for his helpful criticism.

—I am, etc.,

Birmingham General Hospital, Birmingham.

S. P. SINGH.

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<sup>1</sup> Cunningham, R. W., et al., J. Pharmacol. exp. Ther., 1949,

96, 151. Corbin, K. B., J. Amer. med. Ass., 1949, 141, 377. Porteous, H. B., and Ross, D. N., Brit. med. J., 1956, 2, 138.

## Is Thalidomide to Blame?

SIR,—In view of Dr. A. Leslie Florence's letter (December 31, p. 1954) reporting a possible toxic hazard with the sedative/hypnotic drug thalidomide ("distaval"), I feel it is important to record here our present information on this aspect gleaned from four years' clinical investigations.

Until recently both animal experimental work and clinical studies had not revealed any significant toxic hazard from thalidomide, but early in 1960 isolated reports were sent to me from various parts of the country describing symptoms and signs suggestive of peripheral neuritis occurring in patients receiving thalidomide regularly for periods of six months or more. In some of these cases, because of either inadequate data or the simultaneous use of other drugs, it was impossible to say whether thalidomide was responsible. From others, however, we felt satisfied peripheral neuritis could be a toxic hazard, albeit a rare one, and since August of last year information about this has been included in literature supplied with the drug.

The majority of doctors using thalidomide for prolonged periods have observed no adverse reactions, but because of Dr. Florence's report, and the others I have mentioned, we recommend a watch should be kept for changes in sensation in the peripheries should the drug be given over a period of months.—I am, etc.,

Clinical Research Department, DENIS BURLEY. The Distillers Company (Biochemicals) Limited, London S.W.1.

## Status Asthmaticus Treated by Hypnosis

SIR,—Dr. A. H. C. Sinclair-Gieben's case of status asthmaticus relieved by hypnosis (December 3, p. 1651) prompts me to write of a recent experience.

A girl of 13 started asthma in infancy, during a car ride on a visit to the paternal grandmother's home. The usual medicinal treatments and the recommendation of tonsillectomy and adenoidectomy and a residential school were given