is of no value—was found here in the two groups investigated—those with outbreaks of violent tempers and those with Parkinsonism. Once again this minor investigation shows that inert substances produce the same effects as drugs with pharmacological properties; they are useful to patients who believe they will get benefit from them, and they cause undesired side-effects; and the side-effects may be present only with the inert tablets and not with the actual drug.

Summary

Benactyzine was tested in patients with outbreaks of violent temper and in patients with Parkinsonism. It was of no greater value than control tablets.

I thank Drs. Eliot Slater, John Marshall, and John Walton for referring cases to me for this investigation, and Dr. E. A. Carmichael for opportunities to carry out this investigation.

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TRIAL OF A NEW REMEDY (CIBA 10870) IN PARKINSONISM

BY

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In the treatment of Parkinsonism we are always glad to hear of a new remedy. Current therapy leaves much to be desired, and our most effective drugs have unpleasant or dangerous side-effects. We have recently studied the effects of a parasympatholytic drug on a series of Parkinsonian cases. The compound—preparation No. 10870 (Ciba)—is 3-phenyl-3-(β -diethyl-amino-ethyl)-2,6-dioxopiperidine hydrochloride, with the structural formula:

It has already been tried on a series of patients by Giannotti, Gilberti, and Spizzirri (1956). They have reported favourably on its effects in Parkinsonism, alone and in combination with reserpine and methyl phenidate ("ritalin").

Material and Methods

Ten cases of Parkinsonism (four males and six females) were observed in Snowdon Road Hospital, Bristol, by all three of us. Their ages ranged from 47 to 82 years. In six cases the Parkinsonism was attributed to encephalitis lethargica dating from the epidemic in the 1920's and in four cases to idiopathic paralysis agitans. No case of "arteriosclerotic" Parkinsonism was included.

It was decided to stop all current therapy for a day before the trial began. When this decision was taken it was not expected that withdrawal symptoms would be so troublesome. Actually they were severe in three cases. It is difficult to distinguish withdrawal symptoms from basic

symptoms in such cases. The chief symptoms noted were intense salivation, perspiration, and mental depression. One of the three patients threatened suicide unless he was put back on his previous treatment. In other cases these symptoms may have prejudiced the patients against the new tablets.

The compound was dispensed in small white tablets, each containing 2.5 mg. of active drug. Tablets the same size and colour containing an inert substance (ascorbic acid) were used as controls. There was a slight difference in appearance between the two tablets, so that some of the doctors knew which was genuine and which dummy on the first day. It is doubtful if any of the patients recognized the difference in appearance between the two tablets. The tablets were given orally in a dosage of six daily to every patient. The patients were divided into two groups, one taking the dummy tablet (tablet A) for four days, while the other took the genuine tablet (tablet B). At the end of four days the tablets were changed round and each group put on the alternative treatment. In two cases withdrawal symptoms were severe, and tablet A had to be discontinued after one and three days respectively and previous treatment re-instituted. This did not occur with tablet B.

The condition of each patient was assessed by all three observers before and at some time during the trial. On a chart provided for each case points were scored for effects on tremor, rigidity, dribbling, oculogyric crises, facial mask, walking, feeding, reading, and bladder and bowel functions.

Table I gives a general assessment of the results in our 10 patients.

TABLE I

Sex and Age	Type	Previous Therapy	Result with Placebo (Tablet A)	Result with 10870 (Tablet B)
F 49	Post-enceph.	Hyoscine and benzhexol	Worse	Better
F 79	Paralysis agitans	Mephenesin and benzhexol	"	"
F 68	" "	Benzhexol	"	"
F 82	" "	Hyoscine	Mentally confused	No change
F 52	Post-enceph.	Benzhexol	Worse	Better
M 68	" "	"	"	"
M 50	" "	"	"	"
M 47	" "	"	"	"
F 50	" "	Benzhexol and belladonna	"	"
M 63	Paralysis agitans	Hyoscine	"	Better. Euphoria

In addition to these 10 patients we were able to try out the preparation on a further six in outlying hospitals in Thornbury, Wells, and Axbridge. One of us (W. H.) had these patients under observation before and after treatment, but the assessment of results observed at the time is based mainly on observations by the medical officers in charge of these hospitals and by the nursing staff.

The results in these six cases are set out in Table II.

TABLE II

Sex and Age	Type	Previous Therapy	Result with Placebo (Tablet A)	Result with 10870 (Tablet B)
F 45	Post-enceph.	Benzhexol and chlorpromazine	Severe withdrawal symptoms	Excellent
F 75	Paralysis agitans	Barbiturates	Worse	Better
F 74	Post-enceph.	Ethopropazine	"	Better. Euphoria
M 67	" "	Chlorpromazine	Same	Better
F 76	Paralysis agitans	Benzhexol	Worse	"
F 71	" "	Nil	Same	Better. Dry tongue

The general impression was that the new preparation was equal if not superior to any therapy in current use. The best result in individual cases was its effect on salivation in post-encephalitics. One patient who used to soak a pillow on most days dried up completely. Another who

was ambulant and wore bibs of towelling found he could reduce the number of bibs used from four to one daily. On rigidity the results on the whole were good, and excellent in one case. This was in a post-encephalitic who found he could walk with confidence while taking the tablets. Previously he could only shuffle after a chair. Its effect on tremor was not any better than that achieved by current therapy. One patient who could not read while taking hyoscine was able to read on the new treatment.

Side-effects.—Mental confusion occurred in one case. Recovery was complete when the tablets were discontinued. Two patients showed signs of euphoria during treatment; the feeling of well-being seemed out of proportion to the objective improvement noted. After the main trial, blood counts were performed on four patients, and six tablets of 10870 a day were prescribed for 14 days. Blood counts at the end of the period revealed no significant change in the number of leucocytes. No effects on bowel functions were observed. Dryness of the tongue and lips was noted in one case of paralysis agitans, but the patient felt well and did not complain of this particular symptom. No pupillary changes were seen, and the tablets did not interfere with reading. This was a welcome change in one patient, who normally needs 3/50 gr. (3.9 mg.) of hyoscine daily to control salivation.

Summary

A new parasympatholytic drug—Ciba 10870—has been tried out in 16 cases of Parkinsonism. The preparation relieved some of the most troublesome symptoms in every case, and in some cases produced very good results. Mental confusion occurred in one case and disappeared when the drug was stopped. No blood dyscrasias were observed during the trial.

If further trial confirms that prolonged administration is safe the preparation can be recommended for the relief of symptoms in Parkinsonism.

We are grateful to Drs. V. E. N. Allen, N. H. H. Gollidge, A. W. Woolley, and Douglas Henderson for permission to carry out these trials on patients in their hospitals. We are indebted to Mr. P. J. Fowler, chief pharmacist, Southmead Hospital, for a supply of dummy tablets, and to Messrs. Ciba Ltd. for the tablets of No. 10870.

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Speaking at the celebration of World Health Day at London University on April 12, the MINISTER OF HEALTH said that from its inception the United Kingdom had played an important part in the World Health Organization. In terms of money, said Mr. Walker-Smith, we were the third largest contributor. But we did not rate our contribution solely or even primarily in terms of money. We had supplied to the World Health Organization many of our experts in the varied fields of preventive and curative medicine, and we had placed at its disposal our facilities for training many hundreds of medical and health workers from all parts of the world. The Minister added that this country's interest had also been marked by the presence almost continuously since 1948 on W.H.O.'s executive board of a member designated by the United Kingdom. The chief medical officer at the Ministry of Health, Sir John Charles, was this year's chairman of the board. The celebration was arranged by the United Kingdom Committee for the World Health Organization and was held under the chairmanship of Professor C. FRASER BROCKINGTON. Other speakers included COUNTESS MOUNTBATTEN and Dr. P. M. KAUL, assistant director-general in charge of W.H.O.'s advisory services. After thanking the people of Britain for their constant support, Dr. Kaul said that W.H.O. was entering its second decade with a creditable record, the confidence of governments, and a store of experience.

OBSERVATIONS ON SOME "FAST" HAEMOGLOBINS: K, J, N, AND "BART'S"

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Haemoglobin K

When we described the observation of haemoglobin K in a family of South Indian stock (Ager and Lehmann, 1957) we based our identification on a comparison kindly carried out by Dr. R. Cabannes of our "fast-moving" haemoglobin with the pigment described by Cabannes and Buhr in 1955. Its original designation had been haemoglobin I, and this was then altered to haemoglobin J (Cabannes, Duzer, Portier, Massonnat, Sendra, and Buhr, 1956). Finally, at the Congress of the International Society of Haematology in 1956 it was decided to name this haemoglobin K (see Lehmann, 1957). It was thought to be the same as Liberia II, discovered independently by Robinson, Zuelzer, Neel, Livingstone, and Miller (1956). There was one discrepancy: haemoglobin K did not separate from haemoglobin A on acid electrophoresis, but Liberia II showed some separation.

We have now compared our haemoglobin K with eight other samples of haemoglobin K kindly sent by Drs. G. M. Edington, G. L. Robinson, and F. Vella respectively and with one sample of Liberia II sent to us by the American workers. There was no difference at alkaline paper and starch electrophoresis (Fig. 1). However, at

FIG. 1.—Comparison by hanging strip paper electrophoresis at pH 8.6 of haemoglobin mixtures A + K and A + Liberia II. The mobilities are the same in both samples.

acid electrophoresis (paper, pH 6.5) Liberia II showed some slight separation from haemoglobin A, whereas all the haemoglobin A + K samples moved as one band. All the haemoglobin A + K samples, however, had a smaller proportion of the fast-moving haemoglobin than of haemoglobin A. In Liberia II the proportion was more than 50%. When haemoglobin A was added to the Liberia II sample so that the proportion of the "fast" haemoglobin (which of course in acid electrophoresis would move more slowly than A) became 25% no separation from A occurred at acid electrophoresis. Furthermore, if haemoglobin K was eluted after starch electrophoresis and haemoglobin A was added to it in a proportion of 50% a faint separation of the resulting mixture was seen on paper electrophoresis at pH 6.5.

Thus there is no demonstrable difference between the Liberia II sample and haemoglobin K, and we have at present no reason to assume that the two haemoglobins are different. At a recent conference in Istanbul it was decided to reserve the letter N for Liberia II until this