

# THE TREATMENT OF MANIA WITH HALOPERIDOL ('SERENACE')

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IN view of the reports of Mendigutia *et al.* (6), Delay *et al.* (3), Kamphausen (5), Harenko *et al.* (4), Alleva (1), that haloperidol was very effective in controlling manic states, it was decided to treat a number of cases with this diagnosis using this new preparation.

Haloperidol is a compound of some interest in that its chemical structure (4'-fluoro-4-(4-hydroxy-4-(4-chlorophenyl) piperidino) butyrophenone) is related to gamma-amino butyric acid (G.A.B.A.). This substance may be an inhibitory neurohormone which produces central inhibitory states (C.I.S.), Bazemore *et al.* (2). Haloperidol is chemically a member of a class of drugs known as butyro phenones whose development may possibly parallel that of the phenothiazines.

The fact that haloperidol is related chemically to G.A.B.A., an inhibitory neurohormone, makes the state of mania an interesting condition on which to try the effects of this drug.

## METHOD

The patients treated were those admitted to the female admission wards of a mental hospital. The patients all had the diagnosis of manic state, and this was the only criterion of selection used.

Initially intra-muscular administration was used and when the patient was well controlled, administration was substituted. Parkinsonism was treated with Cogentin 2 mg. b.d. Phenergan 25 mg. t.d.s. was used instead of Cogentin, following the publication of the results of the use of antihistamines in controlling drug-induced extrapyramidal syndromes (McGeer *et al.*, 7).

## RESULTS

All ten cases were quickly brought under control. Parkinsonism was marked in six cases but responded to Cogentin 2 mg. b.d. or Phenergan 25 mg. t.d.s. The initial dosage of haloperidol was used at a level of 5 mg. t.d.s. intermuscularly except in three patients who were given 10 mg. t.d.s. intermuscularly to achieve very rapid tranquillization in view of the marked overactivity.

The haloperidol by oral dosage was given as shown in Table I. Case 5 relapsed during the maintenance period and E.C.T. was given in this one case. Some of the cases had previous admissions for manic states which were treated with Largactil and E.C.T. In Table II it can be seen that there is probably a quicker response to haloperidol and no prolonged hospital stays resulted as in cases 3, 8, and 9 when on previous occasions treatment was with Largactil and E.C.T.

TABLE I  
*Haloperidol Dosage Schedules*

Case	Initial dose mg. t.d.s. inter- muscularly	Duration of intra- muscular dosage in days	Oral dose in mg. t.d.s.	Duration oral dose in days	Maintenance dose in mg. t.d.s.	Duration in days of maintenance dose
1	5	5	3	20	1.5	20
2*	10	4	6	20	1.5	28
3	5	3	3	14	1.5	40
4	5	3	3	14	1.5	30
5*	10	4	3	14	1.5	21
6*	10	5	3	10	1.5	15
7	5	6	3	12	1.5	30
8*	10	3	3	4	1.5	28
9*	5	2	3	4	1.5	24
10*	5	5	3	3	1.5	14

TABLE II  
*Duration of Hospital Stay with Haloperidol Medication Compared with Previous  
Periods of Hospitalization when Treatment was with Largactil and E.C.T.*

Case	Duration of hospitalization with Haloperi- dol in days	Duration of stay on previous admissions when receiving Largactil and E.C.T. treatment.			
		Each column represents one period of hospitalization			
1	33	—	—	—	—
2	41	34	35	46	40
3	30	40	365	—	—
4	38	—	—	—	—
5	24	—	—	—	—
6	38	33	10	—	—
7	21	45	33	—	—
8	25	180	14	—	—
9	30	100	—	—	—
10	21	—	—	—	—

#### SIDE-EFFECTS

There were no side-effects except marked Parkinsonism in cases 2, 5, 6, 8, 9 and 10. In these cases, 2, 5, and 6, Cogentin 2 mg. b.d. was used to treat this complication. Extrapyramidal signs quickly subsided on treatment with this drug. Cases 8, 9, and 10 had Phenergan 25 mg. t.d.s. which had a similar required effect.

#### CONCLUSIONS

Haloperidol in effective dosage quickly controlled manic states and rapidly tranquilized the most overactive and noisy of the manic patients. The use of siderooms was diminished and the patients usually only stayed in them on the day of admission. The effect was more rapid than with chlorpromazine and greater tranquilization was effected. There is little doubt that 5–10 mg. of haloperidol intra-muscularly t.i.d. will cut short any manic state. This drug will be particularly useful in general hospitals in post-operative manic conditions.

#### SUMMARY

Ten cases of severe mania were treated with intra-muscular haloperidol and then with oral haloperidol. This medication quickly controlled this type of

patient. Parkinsonism was treated with Cogentin 2 mg. b.d. or Phenergan 25 mg. t.d.s.

The results obtained showed that haloperidol is a powerful neuroleptic drug particularly useful in cases of mania.

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