

as a result of deprivation of social contact but merely suppressed and can be learned under carefully selected and controlled conditions. One of these involves the use of younger, surrogate-peer-reared 'therapist' monkeys who have not yet learned those aggressive responses emitted by older monkeys which Harlow predicts have impeded attempts at habilitation.

I hope these additional references will enable readers to put Harlow's work into a different perspective from that one gets from reading his early work.

JOHN SMITH

*Health Care Evaluation Research Team,
Dawn House,
Sleepers Hill,
Winchester*

References

- HARLOW, H. F. & ZIMMERMAN, R. R. (1959) Affectionate responses in the infant monkey. *Science*, **130**, 421-32.
- NOVAK, M. A. (1975) Social recovery of monkeys isolated for the first year of life. 1. Rehabilitation and therapy. *Developmental Psychology*, **11**, 453-65.
- (1979) Social recovery of monkeys isolated for the first year of life: 2. Test of therapy. *Development Psychology*, **15**, 50-61.
- SUOMI, S. J. & HARLOW, H. F. (1972) Social rehabilitation of isolate-reared monkeys. *Development Psychology*, **6**, 487-96.

TOXIC REACTIONS TO LITHIUM AND NEUROLEPTICS

DEAR SIR,

Toxic neurological reactions to combined lithium/haloperidol treatment was first reported by Cohen and Cohen, 1974 (*Journal of the American Medical Association*, **230**, 1283) and Loudon and Waring, 1976 (*Lancet*, *ii*, 1088), especially at high serum lithium levels and high doses of haloperidol. Thomas also reported (*Journal*, May 1979, **134**, 552) a further case differing in that the patient had experienced previous treatment with lithium/haloperidol combination without developing toxic side-effects. A similar syndrome was recorded by West, 1977 (*British Medical Journal*, *ii*, 642) after exposure to lithium/flupenthixol combination.

I would like to report a case of toxic reaction to combined treatment with lithium and fluphenazine:

A 25-year-old man with a manic episode and a seven-year history of manic-depressive psychosis was given fluphenazine, 75 mg in a single i.m. dose which was repeated one week later. In addition, patient was receiving chlorpromazine, 300 mg and trihexiphenidyl ('Artane'), 5 mg daily. Haloperidol drops were given eventually and

for a few days in a maximum dose 2.5 mg/day. Lithium treatment was started 10 days after the second administration of fluphenazine and more than 10 days after the last administration of haloperidol, with 900 mg lithium carbonate daily, giving serum level 0.9 mEq/l. Four days after starting lithium treatment the patient developed tremulousness, rigidity, dysarthria, ataxia, tiredness, vomiting and confusion. Serum lithium level was 1.0 mEq/l. Lithium and chlorpromazine were stopped and 'Artane', 30 mg/day and 'Disipal', 12 mg/day, were given without any significant effect. The patient gradually improved and became functional after two months, with no clear evidence of organic brain damage.

One month later he became hypomanic and lithium treatment was attempted again starting with low doses (300 mg) and progressively increasing to 1800 mg/day, in addition to chlorpromazine, 300 mg/day. No side effects were noted, while serum level was 0.86 mEq/l. In previous episodes the patient had been treated with large doses of neuroleptics (chlorpromazine, 900 mg, haloperidol, 30 mg daily and fluphenazine, 75 mg/week) without exhibiting side-effects.

The case suggests that the toxic reaction was due to lithium-fluphenazine interaction, as previous treatment with neuroleptics and subsequent treatment with lithium and chlorpromazine, but without fluphenazine, did not produce adverse effects. Haloperidol, given in a small total dose long before lithium administration seems not to account for the side-effects observed.

BASIL ALEVIZOS

*University of Athens,
Department of Psychiatry,
Eginition Hospital,
74, Vass. Sophias Str.,
Greece*

INFORMAL PATIENTS DETAINED

DEAR SIR,

The analysis of compulsory admissions by Elliott, Timbury and Walker (*Journal*, August 1979, **135**, 104-14) gives only a partial picture of the implementation of Section 31, the emergency Section. While the authors refer to "a three-fold increase in the use" of powers to detain informally admitted patients they omit the precise figures for these cases. A recent unpublished study by me at the Royal Edinburgh Hospital revealed that of 100 consecutive Section 31 applications, 38 were in respect of resident patients. If this use of the Act were included in the Gartnavel study, the mean annual figure of 71.6 Section 31s, which the authors reported, would undoubtedly be very much higher.

The use of 2nd, 3rd and 4th Section 31s in 10 per cent of the 1962-72 cohort is worrying and is clearly at variance with the intention of the lawmakers. The consequence is that patients are detained for 14, 21 or