

TRIHXYPHENIDYL DEPENDENCE—REPORT OF TWO CASES

ALBERT MICHAEL¹, M. B. B. S.

T. MURALI², D. P. M.,

P. JOHN MATHAI³, D. P. M.,

P. S. GOPINATH⁴, M. D.

SUMMARY

Two cases of normal dose dependence on Trihexyphenidyl are reported. The literature on anti-parkinsonian drug abuse and dependence is briefly reviewed.

Trihexyphenidyl (T.H.P.) is a drug commonly used to control neuroleptic induced and other extrapyramidal symptoms. Trihexyphenidyl has a powerful anticholinergic and mild euphoriant effect (Jellinek, 1977; Goggin & Solomon, 1979). Psychological and probably physical dependence on T. H. P. has been reported in patients who receive high doses (30-40 mg) per day (Kaminer *et al.*, 1982). We have not come across any report of dependence on a drug like T. H. P. from India. Mohan *et al.* (1981) reported two cases of T.H.P. abuse and discussed the possibility of developing dependence on the same. Two cases of T. H. P. dependence who were receiving only 6 mg. per day are being reported

CASE REPORTS

A 28 year old male diagnosed as schizophrenia (I.C.D.-IX) was on Trifluoperazine 15-20 mg. and T.H.P. 6 mg per day since 1974. When T.H.P. was withdrawn as a part of another study he developed tachycardia (pulse 110 per minute) restlessness, aggressiveness, lethargy, giddiness, sweating and craving for the drug without any rigidity, tremor or bradykinesia. He developed all these symptoms about 12 hours after stopping the drug. The symptoms per-

sisted for about 4 days with minimal decrease in severity. Very frequently he approached the psychiatrist and communicated his distress. He insisted for a prescription of T. H. P. In order to confirm the diagnosis of dependence, T. H. P., was restarted in the original dosage. His symptoms disappeared dramatically 2 hours after the first dose.

Similar symptoms were observed in another 30 year old schizophrenic on Chlorpromazine 300-600 mg and T.H.P. 6 mg per day for the last 6 years on withdrawal of the latter. The symptoms abated dramatically when the drug was restarted.

DISCUSSION

Here we have reported two patients who developed dependence on T. H. P., while receiving only 6 mg of the drug per day. Though abuse and dependence on T. H. P. are known the reports in these areas are scanty. The paucity of literature in this area is probably not due to the unawareness but due to inadequate attention paid to it.

This report of dependence on T. H. P. brings out various interesting aspects. Regarding the diagnosis the frequent demanding of THP by a patient is an indication to suspect abuse or dependence. This is especially so if

¹&²Junior residents
³Senior resident
⁴Associate Professor

Department of Psychiatry,
National Institute of Mental Health & Neuro Sciences,
Bangalore-560 029.

there is a history of other drug abuse in the past (Mac Vicar, 1977). The toxic reactions can mimic the primary symptoms of a psychiatric syndrome leading to misdiagnosis (Mac Vicar, 1977). It is possible that a patient with dependence or abuse of T. H. P. might feign extrapyramidal symptoms to ensure a prompt supply of the drug (Rubinstein, 1978).

These patients were not interested in increasing the dose of T.H.P. The absence of tolerance does not preclude dependence. The development of a similar dependence on Benzodiazepines while on therapeutic dosage has been reported (Lader, 1983).

Though the exact mechanism of dependence on T. H. P. is not known it is possible that the euphoriant effect (Jellinek, 1977; Goggin & Solomon, 1979; Kaminer *et al.*, 1982) plays an important role. This subjective euphoria could be a psychological analogue of the relief from akinesia syndrome (Jellinek, 1977). Though THP abuse for its hallucinogenic effect is known especially among thrill seeking adolescents (Rouchel & Dixon, 1977) and among prisoners (Woody & O' Brien,

1974); it is not likely to play a role in the development of dependence in therapeutic doses.

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