Volume 18 Number 4

lack of reports of sustained intravenous abuse of diethylpropion.

Diethylpropion could more easily be used as an oral euphoriant. The 25 mg diethylpropion tablet would then be equivalent to 2 to 4 mg of d-amphetamine. The euphorigenic potential of the 75 mg Dospan preparation cannot be estimated since plasma studies in man following administration of diethylpropion in this preparation indicate delayed absorption.20 The abscence of data on the euphorigenic properties following oral administration of other centrally active sympathomimetic amines, especially those of low abuse potential, such as ephedrine, prevent relative comparisons. Consequently, judging relative abuse potential of oral diethylpropion on the basis of relative euphoric properties remains moot. The low incidence of oral abuse may indicate a relatively lower abuse potential than d-amphetamine. This estimate is consistent with general experience with other psychoactive drugs pharmacologically equivalent to standard drugs of high abuse potential that are widely available with relatively low levels of abuse. This is especially true of narcotic analgesics with drugs such as codeine,11,11 d-propoxyphene, ". " and diphenoxylate." The low abuse potential of these narcotic analgesics is generally held to be related to their availability exclusively or predominantly as oral preparations in low dosage units and to their physiochemical properties, which make intravenous abuse of the agent of preparation difficult or impossible.

On the basis of these studies, diethylpropion appears to be qualitatively similar to d-amphetamine in its action with a parenteral potency half that of ephedrine.

References

1. Biel, J. H.: Structure-activity relationships of amphetamine and derivatives, in Costa, E., and Garattini, S., editors: International symposium on amphetamines and related compounds, New York, 1970, Raven Press, pp. 3-19.

2. Boxill, G. C., Ben, M., Hillyard, I. W., and Warren, M. R.: The cardiovascular smooth

muscle actions of chlorphentermine hydrochloride (p-chiοτο-α,α-dimethylphenethylamine) a new anorexigenic agent, J. Pharmacol. Exp. Ther. 137:198-205, 1962.

651

3. Caplan, 1.: Habituation to diethylpropion (Tenuate), Can. Med. Assoc. J. 88:943-944,

1963.

4. Clein, L. J., and Benady, D. R.: Case of diethylpropion addiction, Br. Med. J. 2:456,

5. Finney, D. J.: Statistical method in biological assay, ed. 2, New York, 1964, Hafner Publishing Co.

6. Fraser, H. F., and Isbell, H.: Pharmacology and addiction liability of dl- and d-propoxyphene, Bull. Narc. 12:9-14, 1960.

7. Fraser, H. F., and Isbell, H.: Human pharmacology and addictiveness of ethyl 1-(3cyano-3,3-phenylpropyl)-4-phenyl-4-piperidine earboxylate hydrochloride (R-1132, Diphenoxylate), Bull. Narc. 13:29-42, 1961.

8. Fraser, H. F., Van Horn, G. C., Martin, W. R., Wolbach, A. B., and Isbell, H.: Methods for evaluating addiction liability: (A) "Attitude" of opiate addicts toward opiate-like drugs, (B) a short term "direct" addiction test, J. Pharmacol. Exp. Ther. 133:371-387, 1961.

9. Cylys, J. A., Hart, J. J. D., and Warren, M. R.: Chlorphentermine, a new anorectic agent, J. Pharmacol, Exp. Ther. 137:365-373, 1962.

- 10. Haertzen, C. A.: Development of scales based on patterns of drug effects, using the Addiction Research Center inventory (ARCI), Psychol. Rep. 18:163-194, 1966.
- 11. Jasinski, D. R., Martin, W. R., and Hoeldtke, R.: Studies of the dependence-producing properties of GPA-1657, profadol, and propiram in man, Clin. Pharmacol. Then. 12:613-649, 1971.
- .12. Jones, H. S.: Diethylpropion dependence, Med. J. Aust. 1:267, 1968.
- 13. Jonsson, C. O., and Sjöberg, L.: Studies in the psychological effects of a new drug diethylpropion, Scand. J. Psychol. 8:39-46, 1967.
- 14. Kay, D. C., Gorodetzky, C. W., and Martin, W. R.: Comparative effects of codeine and morphine in man, J. Pharmacol. Exp. Ther. **156:101-106, 1967.**

15. Kuenssberg, E. V.: Diethylpropion, Br. Med. I., vol. 2, pp. 729-730, 1962.

16. Martin, W. R., Sloan, J. W., Sapira, J. D., and Jasinski, D. R.: Physiologic, subjective, and behavioral effects of amphetamine, methamphetamine, ephedrine, phenmetrazine, and methylphenidate in man, CLIN. PHARMACOL. THER. 12:245-258, 1971.

17. Medical letter: Diethylpropion, an appetite suppressant, vol. 13, no. 25, issue 337, 1971.