Clinical Pharmacology and Therapeutics

Fig. 1. Chemical structures of amphetamine-like drugs.

ods for assessing amphetamine-like subjective effects which are related to their abuse and abuse potentiality.

Methods

Physiological and behavioral measures. Subjects participating in these studies were male prisoners serving sentences at the Clinical Research Center, Lexington, Kentucky, for Federal crimes committed in connection with narcotic use. All subjects volunteered for the study and were examined to ensure their mental and physical suitability. Studies were conducted on the wards of the Addiction Research Center. At weekly intervals the subjects were admitted to the Addiction Research Center ward the evening prior to the test day. All were interviewed, and blood pressure, pulse rate, and body temperature were determined in order to detect intercurrent minor illnesses. After dinner was served, the patients engaged in various ward activities (table games, television, reading) until they retired. The patients were awakened at 0600, and breakfast was served on the ward. Base-line physiologic observations were obtained at 0700 and 0730. Medication was administered subcutaneously in a 2 ml. volume at 0800 on a double-blind basis, and physiologic observations were made and questionnaires completed by both subjects and observers at 0830, 0900, 1000, 1100, 1200, 1300, and 2000.

The following physiological observations were made: (1) indirect blood pressure (always determined on the same arm by the same observer with the patient supine: mean blood pressure calculated as the diastolic pressure plus one third of the pulse pressure: blood pressure determinations repeated until 3 consecutive mean pressures fell within a 5 mm. range); (2) pulse rate; (3) respiratory rate; (4) rectal temperature; and (5) pupil diameter (determined photographically in 30 foot candles of light with an accommodation distance of 26 inches). The food chosen by the patients at lunch, which was served at 1130, was weighed and the caloric content calculated from standard tables. The caloric content of uneaten food was not measured. This measure then is an index of the appetite of the patient at the time that he went through the food

The questionnaires completed include the single dose questionnaire for both subjects and observers and a psychological test completed by the subjects which consisted of questions from the following scales