

strong physical dependence on barbiturates. Upon abrupt withdrawal of the drug most of the subjects exhibited a "major" abstinence syndrome (grand mal convulsions and a delirium resembling alcoholic delirium tremens), and all subjects showed "minor" symptoms (insomnia, tremor, anorexia, weakness, anxiety and paroxysmal discharges in the electroencephalogram). Abstinence symptoms decreased in severity with decreasing dosage until at the critical level of 0.4 Gm. of secobarbital or pentobarbital daily a clinically significant degree of physical dependence was not usually created. Two patients received 0.2 Gm. of either drug nightly for one year, and after drug withdrawal these patients showed no significant signs of abstinence syndrome. Until more exact information becomes available, it may be assumed that an amount of any barbiturate which is equivalent in hypnotic potency to more than 0.4 Gm. secobarbital will induce some degree of physical dependence. Development of a high grade of physical dependence from barbiturates requires that the dosage be sufficiently large continuously to maintain definite impairment of motor coordination (i.e., clinical intoxication). (Fraser, H. F., and others: *Degree of Physical Dependence Induced by Secobarbital or Pentobarbital*, *J. A. M. A.* 166: 126 (Jan. 11) 1958.)

CHLORPROMAZINE This drug has a differential action in the cat on reflexes conditioned to central and peripheral stimulation. At an average dose of 7 mg./kg. the depression to peripheral stimuli is complete whereas cortical stimulation can elicit flexion. This differential action is not seen with *d*-lysergic acid diethylamide, morphine or pentobarbital. The relation of the above experiments to the accepted consensus that chlorpromazine depresses or blocks the arousal system is not clear. (Rutledge, L. T., and Doty, R. W.: *Differential Action of Chlorpromazine on Reflexes Conditioned to Central and Peripheral Stimulation*, *Am. J. Physiol.* 191: 189 (Oct.) 1957.)

CHLORPROMAZINE Of 900 patients treated with Chlorpromazine, 17 developed jaundice after 4 to 5 weeks of treatment. Although the syndrome was self-limited,

occasionally there was permanent liver damage. Treatment was equivocal but, in some cases, the use of adrenocortical hormone or anti-histamines was employed. In 9 of 11 patients, tests showed retained sensitivity. No cross sensitivity with promazine was demonstrated suggesting that other phenothiazine derivatives might be used in place of chlorpromazine when sensitivity to the latter develops. (Hollister, L. E.: *Allergy to Chlorpromazine Manifested by Jaundice*, *Am. J. Med.* 23: 870 (Dec.) 1957.)

ATARACTICS Acute alcoholics are successfully treated with ataractics. Vomiting and symptoms of gastritis are controlled, shaking is relieved, sleep is attained and delirium tremens prevented. The relative merits of the specific compounds available are debatable. Chlorpromazine is prone to produce hypotension. Potentiation of alcohol and barbiturate depression by the ataractics must be anticipated. Ataractics such as promethazine have found an established place in anesthesia. The amount of anesthetic required is substantially reduced, operative shock is more easily reversed, muscle tone and reflexes are obtunded, and the suppression of autonomic reflexes provides a smooth post-operative course. (Rose, T. F.: *Use and Abuse of Tranquilizers*, *Canad. M. A. J.* 78: 144 (Jan. 15) 1958.)

TISSUE EDEMA Promethazine apparently reduces tissue edema by decreasing capillary permeability. (Arneill, J. R.: *Investigation of Promethazine in General Surgical Practice*, *Am. J. Surg.* 94: 757 (Nov.) 1957.)

METHOPROMAZINE Methopromazine in general has properties similar to those of chlorpromazine. Its acute toxicity in animals is similar to that of chlorpromazine; prolonged oral administration 5-10 mg./kg. for one month has shown complete innocuousness of the drug with regard to the hematopoietic system, the lymphatic system, the liver and the kidneys. In anesthetized animals (dog, cat, rabbit) intravenous methopromazine produces a transient and mild hypotension without ECG changes. Its intravenous administration also neutralizes or prevents