

crease the rate of metabolism of the catecholamines. Epinephrine and norepinephrine disappear from the animal in two phases; the first a period of rapid metabolism primarily by oxygen methylation; and the second phase a slower one, when part of the catecholamines are bound to tissue constituents and then released and metabolized slowly. The findings in mice suggest that the sympathomimetic amines may increase the rate of metabolism of epinephrine and norepinephrine in part by preventing the protective binding of the catecholamines to tissue constituents. (Axelrod, J., and Tomchick, R.: *Increased Rate of Metabolism of Epinephrine and Norepinephrine by Sympathomimetic Amines*, *J. Pharmacol. Exp. Ther.* 130: 367 (Dec.) 1960.)

**ANALEPTICS** The consideration of analeptics is limited to those drugs which stimulate the central nervous system as their primary action. Emphasis is placed on the effects of the analeptics in the presence of barbiturates and other anesthetic depressants of the central nervous system. Despite the existence of controversy in the treatment of barbiturate intoxication, considerable data and supportive evidence are provided to show that analeptics should not be rejected in the overall management of barbiturate poisoning. (Hahn, F.: *Analeptics*, *Pharmacol. Rev.* 12: 447 (Dec.) 1960.)

**BARBITURATE POISONING** Fourteen patients with severe acute barbiturate intoxication have been treated by a regimen of forced diuresis produced by infusion of a 15 per cent solution of urea and alkalinization of the urine. In most cases 100 ml. of the 15 per cent urea solution were given hourly. Minor adjustments of the urea load were necessary to keep the diuresis at 500 to 800 ml. per hour. As the diuresis increased, additional fluid without urea was given intravenously. The additional fluid was composed of potassium chloride 12 mEq. per liter, sodium lactate 40 mEq. per liter, and glucose 200 mEq. per liter. Four of these same patients had previously been observed in the same department for intoxication with the same barbiturate for which they were later given diuretic treatment. These patients acted

as their own controls. The over-all elimination rate of barbiturate from the body was increased in all 14 cases over that of comparable control cases. The treatment was not equally effective in poisoning produced by all types of barbiturates. The period of unconsciousness was generally reduced to one half or a third. One patient suffered transient pulmonary edema and another severe dehydration. (Lassen, N. A.: *Treatment of Severe Acute Barbiturate Poisoning by Forced Diuresis and Alkalinization of Urine*, *Lancet* 2: 338 (Aug. 13) 1960.)

**THIOPENTAL WITH MEGIMIDE** It has been claimed that if megimide and thiopental are mixed together on a 1 to 3 ratio, the anesthetic potency of thiopental is not decreased but there is less respiratory depression. The potency ratio of thiopental and a 3 to 1 mixture of thiopental and megimide has been determined in 7 dogs by a servo-controlled, cross-over experiment employing the electroencephalogram as an index of drug action. Thiopental was found to be 1.51 times as potent as thiopental plus megimide. (Bellville, J. W., Murphy, T., and Howland, W. S.: *Potency of Thiopental Plus  $\beta,\beta$ -Ethylmethylglutaramide*, *J. Pharmacol. Exp. Ther.* 130: 364 (Nov.) 1960.)

**TRIMETHOBENZAMIDE** A hitherto unrecognized property of the antimetic drug trimethobenzamide (Tigan) is its action in suppressing the reflexes of the pharynx and larynx, a desirable factor in many surgical procedures. This drug has a swift and effective action in restoring normal functioning of these mechanisms permitting anesthesia and surgery to proceed without incident. (Sheiner, B.: *Use of Trimethobenzamide (Tigan) in Anesthesia*, *Canad. Med. Ass. J.* 83: 1377 (Dec. 24) 1960.)

**ANTIEMETICS** The antiemetic properties of 4 commonly used phenothiazine preparations has been tested in dogs by the use of apomorphine, digitalis, nicotine, and nitrogen mustard-induced vomiting. The depressant properties of these drugs was also tested to determine whether or not the antiemetic effect was on the basis of central sedation. Fluphenazine