Drugs

DIAZEPAM FOR CARDIOVERSION Diazepam was administered in 5-mg increments every three to five minutes until slurring of speech occurred, at which time cardioversion was performed. The total dose of diazepam ranged from five to 30 mg. Response during cardioversion varied from a twitch to subsequent recollection of a loud outcry. Amnesia was inadequate in three patients. Most patients were alert in 30 minutes or less and vital signs were not affected significantly. Slowing of respiration and Cheyne-Stokes respiration occurred in two chronically-debilitated patients with chronic obstructive pulmonary disease who received five and 15 mg diazepam, respectively. No respiratory assistance was required. The only patient complaint reported was burning along the course of the vein when the drug was administered too rapidly. (*Henrix, G. H.: Intravenous Use of Diazepam in Cardioversion, Southern Med. J. 62: 483 (April) 1969.*)

NARCOTICS The administration of morphine to healthy volunteers and to patients with myocardial infarction was associated with increases in deadspace:tidal-volume ratio (V_D/V_T), increases in alveolar:arterial oxygen-tension difference (A-a gradient) and decreases in blood pressure. The administration of the analgesic pentazocine to a healthy volunteer and to patients with myocardial infarction was associated with increases in blood pressure and decreases in V_D/V_T and A-a gradient. Pentazocine seems preferable to morphine for relieving pain after myocardial infarction. (*Lal, S., and others: Cardiovascular and Respiratory Effects of Morphine and Pentazocine in Patients with Myocardial Infarction, Lancet 1: 379 (Feb.) 1969.*)

INTRACRANIAL PRESSURE Halothane, trichloroethylene, and methoxyflurane produced greater increases in intracranial pressure in patients with intracranial space-occupying lesions than in patients with normal cerebrospinal fluid pathways. Blood pressure was reduced and cerebral perfusion decreased strikingly. The increased intracranial pressure would be expected to accentuate internal brain hernias and, if the skull were opened, to result in difficult operating conditions and external herniation of the brain. (*Jennett, W. B., and others: Effect of Anaesthesia on Intracranial Pressure in Patients with Space-occupying Lesions, Lancet 1: 61 (Jan.) 1969.*)

HALOTHANE HEPATOTOXICITY The effects of halothane and surgical operation on hepatic function were investigated in dogs. Two hours of halothane anesthesia did not cause hepatic damage, but identical anesthesia combined with cholecystectomy resulted in significant increases of BSP retention, which returned to normal on the third postoperative day. No change in hepatic perfusion was found. Under the conditions of these experiments, surgical trauma and not halothane was responsible for the postoperative changes in hepatic function. (*Jakab, T., and others: Experimental Investigations on the Hepatotoxic Effect of Halothane, Der Anaesthesist 18: 85 (March) 1969.*)

ANALYSIS OF ANESTHETIC CONCENTRATIONS Concentration analysis of alveolar gas samples through the use of a thermal conductivity detector was highly reproducible, with coefficients of variation of 1.3 per cent in ether, 1.8 per cent in N_2O, 0.5 per cent in CO_2 and 1.4 per cent in O_2. Measurements of ether in blood (10 μl), following its direct injection into a flame ionization detector, yielded a coefficient of variation of 3.1 per cent. Measurements of N_2O and CO_2 in blood,