

LIVER FUNCTION A battery of liver function tests were performed on 30 patients for operation, anesthetized with either Fluothane, cyclopropane or ether. Abnormalities occurred in 5 of 10 patients given Fluothane, 4 of 10 given cyclopropane, and 8 of 10 given ether. The abnormalities were often isolated and of questionable significance. There appeared to be no difference of the three agents as determined by the tests performed. (Little, D. M., Jr., Barbour, C. M., and Given, J. B.: *Effects of Fluothane, Cyclopropane, and Ether Anesthetics on Liver Function, Surg. Gynec. & Obst.* 107: 712 (Dec.) 1958.)

HYPOTHERMIA High spinal anesthesia via the cisterna magna in dogs failed to afford protection from ventricular fibrillation resulting from 10 minutes of inflow occlusion and right ventriculotomy at 25 C. This is in contrast to the protection reported from sympathetic denervation of the heart by other methods such as subepicardial infiltration of the atriacaval junction with procaine, bilateral stellate and upper dorsal ganglionectomy, or use of ganglion blocking drugs such as Arfonad. (Margolis, R. N.: *Physiologic Changes in Hypothermia and the Problem of Hypothermic Ventricular Fibrillation, Bull. Tufts—New England Medical Center* 4: 151 (July-Dec.) 1958.)

HYPOTHERMIA Heart muscle and thigh muscle was removed rapidly from dogs which had been maintained at a temperature of 23 to 25 C. for 30 minutes. Distribution of sodium, potassium and calcium ions was found to be remarkably similar to that found in normothermic animals. Similarly no abnormalities were found in the serum and erythrocyte water and electrolyte concentrations. (Moulder, P. V., and others: *Biochemistry of Blood, Heart and Skeletal Muscle Under Induced, Controlled Hypothermia, A.M.A. Arch. Surg.* 78: 37 (Jan.) 1959.)

HYPOTHERMIA FOLLOWING CARDIAC ARREST Hypothermia is recommended immediately following cardiac arrest when there is evidence of central nervous system injury. Temperature should be maintained at 32 to 34 C. until there is good evidence of neurologic improvement. Benefits

of hypothermia are based upon its observed modification of brain swelling. (Goldberger, E.: *Progress Notes in Cardiology, Am. J. Card.* 3: 130 (Jan.) 1959.)

LOCALIZED HYPOTHERMIA A cooling cannula through which a solution of acetone can be circulated by a small brush pump has been devised. By this means, localized hypothermia has been produced in 3 patients for the treatment of cerebral neoplasms. In all 3, malignant cerebral tumors were identified, and the cooling cannula was inserted in the region of the tumor. Circulation of the cooling fluid was usually maintained for 30 minutes. At the end of this time, the temperature at the tip of the cannula was -20 C., and 2.5 cm. from the tip of the cannula, the brain temperature was 30 C. Frozen areas of brain and tumor around the cannula were removed. None of the patients suffered ill effects from the procedure, and one patient appeared to improve. (Rowbotham G. F., Haigh, A. L., and Leslie, W. G.: *Cooling Cannula for Use in Treatment of Cerebral Neoplasms, Lancet* 1: 10 (Jan. 3) 1959.)

HYPOTHERMIA The effect of hypothermia upon cardiac input was studied in 10 dogs anesthetized with thiopental. Cardiac input was measured by direct cannulation of the great veins. The average cardiac input was 135 ml./kg./minute at 37 C., whereas at 25 C. this figure was reduced to 40 ml. Cardiac input decreased 9.3 per cent per degree fall in temperature from 37 to 30 C., and 3.6 per cent per degree fall from 30 to 25 C. (King, H., and Bounous, C.: *Cardiac Input in Hypothermia, Surg. Gynec. & Obst.* 107: 753 (Dec.) 1958.)

HYPOTHERMIA Dogs were anesthetized with intraperitoneal pentobarbital, and hypothermia to 26 to 29 C. was produced and maintained for 72 hours. The abdomen was opened and a standard manipulation of the small bowel was carried out. Hypothermia in this range did not significantly depress the production or excretion of cortical steroid. However, recovery from this prolonged hypothermia after operation was associated with an increased excretion of cortical steroids which