with Intermittent Positive Pressure Breathing, Surg. Gynec. Obstet. 111: 517 (Oct.) 1960.)

POTASSIUM AND DIGITALIS Buffered isotonic potassium phosphate was administered to dogs before digitalization. An average of 16.6 mEq. of the cation was necessary to produce atrioventricular block. The same procedure was carried out after administration of toxic doses of digitoxin. In this group an average amount of only 7.2 mEq. was necessary to produce atrioventricular block, and sino-atrial block and arrest were frequent. Infusion of potassium into animals intoxicated with digitoxin produced atrioventricular block not only with less potassium but also at a lower plasma level. There was also a steeper rise of the plasma potassium level in this group of experiments. These studies suggest that potassium should be given with caution to digitalis-intoxicated patients in whom the intoxication is manifested by abnormalities of atrioventricular conduction. *(Fisch , C., Martz, B. L., and Friebe, F. H.: Enhancement of Potassium-Induced Atrioventricular Block by Toxic Doses of Digitalis Drugs, J. Clin. Invest. 39: 1885 (Dec.) 1960.)*

SYMPATHOADRENAL SUPPRESSION Cyclopropane or halothane produce a significant reduction in the degree of tachycardia and arterial hypertension caused by carbon dioxide inhalation in man. The degree of suppression was greater during halothane anesthesia. Cardiac arrhythmias seldom occurred in conscious persons during carbon dioxide inhalation. In anesthetized patients, they were found frequently and proved to be a more reliable guide as to the presence of respiratory acidosis than was any hemodynamic function. Halothane may reduce the sympathoadrenal response to hypercarbia through central autonomic action. Postcyclopropane hypotension may be marked because the sympathoadrenal response to hypercarbia is well preserved and possibly enhanced during cyclopropane administration. *(Price, H. L., and others; Modification by General Anesthetics (Cyclopropane and Halothane) of Circulatory and Sympathoadrenal Responses to Respiratory Acidosis, Ann. Surg. 152: 1071 (Dec.) 1960.)*

ADRENAL SUPPRESSION Alterations in the adrenocortical response after five weeks of prednisone therapy (20 mg. daily) were evaluated. A moderate reduction in response of the adrenal cortex was noted within 10 to 14 days after the onset of prednisone therapy. An additional three weeks of therapy produced a marked suppression of adrenal output of 17-hydroxycorticosteroids in response to either surgical stress or ACTH. The changes in adrenocortical function induced by prednisone were associated with only minimal evidence of adrenocortical atrophy pathologically. *(Marks, L. J., Chute, R., and Sallade, R. L.: Rapid Functional Suppression of Adrenal Cortex Due to Prednisone Therapy, New Engl. J. Med. 264: 10 (Jan. 5) 1961.)*

CARBOHYDRATE METABOLISM The administration of epinephrine during ether anesthesia in man produced a greater than normal rise in blood glucose and less than expected elevations in pyruvate, lactate and citrate levels. The administration of insulin during ether anesthesia failed to depress blood glucose and inorganic phosphorus levels. Increased sensitivity to insulin was observed in one patient during thiopental anesthesia. The data suggest that ether may alter the cellular transfer and phosphorylation of glucose in a manner not fully explained by the reflex release of endogenous epinephrine. The administration of tolbutamide during ether anesthesia depressed both blood glucose and serum inorganic phosphorus levels. This effect of tolbutamide suggests that it may have a glycostatic effect independent of its effect on insulin secretion. *(Henneman, D. H., and Vandam, L. D.: Effect of Epinephrine, Insulin, and Tolbutamide on Carbohydrate Metabolism During Ether Anesthesia, Clin. Pharmacol. Ther. 1: 694 (Nov.-Dec.) 1960.)*

CATECHOLAMINES Many types of drugs alter the rate of metabolism of the catecholamines. A study has been made of the effect of certain sympathomimetic amines on the rate of disappearance of epinephrine and norepinephrine in the intact mouse. The drugs tested included ephedrine, amphetamine, tyramine, paredrine and synephrine. The findings indicated that these amines do in-