

cardiac surgery with the anticipation that prophylactic value may follow and without fear of detrimental results. (Rodman, R., and Pastor, B. H.: *The Hemodynamic Effects of Digitalis in the Normal and Diseased Heart*, *Amer. Heart J.* 65: 564 (Apr.) 1963.)

HEART NOREPINEPHRINE Utilizing serial blood samples from the coronary sinus and femoral artery and biopsies from an atrial appendage, fluorometric determinations of blood and tissue norepinephrine content were done before, during and after intravenous injections of guanethidine sulfate (15 mg./kg. free base) and reserpine (3 mg./kg. free base) in a small series of pentobarbital anesthetized dogs. Following guanethidine, there was immediate marked release of norepinephrine from the heart indicated by increased concentration in coronary sinus blood and a reduction in the atrial appendage tissue concentration. The increased coronary sinus levels of norepinephrine persisted three hours and were associated with appropriate adrenergic responses; thereafter the continued depletion of tissue norepinephrine was unaccompanied by either elevated coronary sinus levels or adrenergic responses. Following reserpine, there was no immediate rise in coronary sinus blood norepinephrine and the adrenergic response was consistently smaller than with guanethidine. However, there was marked decrease of atrial appendage tissue concentration of norepinephrine after four hours. The initial rapid reduction of norepinephrine in heart tissue following reserpine may be due to early alteration of metabolism of the catecholamines, perhaps a reduced synthesis in heart muscle, while the initial reduction following guanethidine is probably secondary to early rapid release of stores, altered metabolism occurring only later. (Harrison, D. C., and others: *Relationships Between the Release and tissue Depletion of Norepinephrine from the Heart by Guanethidine and Reserpine*, *Circ. Res.* 12: 256 (Mar.) 1963.)

METHYLDOPA Methyldopa, an inhibitor of decarboxylase, may exert its hypotensive action by inhibiting the synthesis of noradrenaline, but this is not certain. Dosage is less critical than with ganglionic blocking agents and the degree of postural hypotension is usu-

ally less. Side effects are minimal and judicious combination of this drug with Rauwolfia alkaloids, ganglionic blocking agents and others to suit each patient's needs will be more widely used. (Smirk, H.: *Hypotensive Action of Methyldopa*, *Brit. Med. J.* 1: 147 (Jan. 19) 1962.)

TRASYLOL Burns fatal to mice in the control series were treated with very high doses of Trasylol with 95 to 100 per cent survival. Trasylol is a non-allergenic polypeptide which inhibits trypsin, kallikrein, chymotrypsin and plasmin between pH 5 and 7.8. Normal trypsin inhibitor is ineffective between pH 6.5 and 6.8. (Koslowski, L., Darckowa, D., and Waschkeit, G.: *Trasylol*, *Chirurg.* 33: 533, (Dec.) 1962.)

VASOPRESSIN Circulatory effects of vasopressin are increased arterial pressure, bradycardia, and reduced splanchnic perfusion after larger dose; coronary, renal and lower extremity blood flows are reduced. The synthetic product has an effect 5 times greater on blood pressure and 10 times less on antidiuresis than naturally found lysin-vasopressin. The action is directly on vascular musculature. Side effects are pallor of skin, nausea, vomiting, defecation and micturition. Indications for use are bleeding of esophageal varices and hypovolemic shock. (Tsakiris, A., and Buhlmann, A.: *Effects on Circulation of a New Vasopressin*, *Deutsch. Med. Wschr.* 88: 46 (Jan.) 1963.)

ANGIOTENSIN Digital vascular responses to intravenous and intra-arterial infusions of angiotensin II and norepinephrine were studied in man. Angiotensin II constricts the precapillary (resistance) vessels of the digit without associated constriction of the post-capillary (capacitance) vessels. Norepinephrine produces constriction of both pre and post-capillary blood vessels. (DePasquale, N. P., and Burch, G. E.: *Angiotensin II, Digital Blood Flow, and the Pre-capillary and Post-capillary Blood Vessels of Man*, *Ann. Intern. Med.* 58: 278 (Feb.) 1963.)

ERGOMETRINE Forceps delivery or cesarean section was accomplished with light