

by 34 per cent as measured by the heated thermocouple technique. This change in blood flow was not accompanied by any significant change in arterial blood pressure. The reduction results from a greatly increased resistance to flow that may be due to an abolition of sympathetic vasodilator tone and an unmasking of the vasoconstrictor action of epinephrine on the alpha receptors. After treatment with propranolol, hemorrhagic hypotension resulted in striking increases in the resistance to flow within the myocardium. This was in marked contrast to healthy dogs, in which myocardial blood flow was maintained between blood pressure levels of 120 and 40 mm. of mercury. It is suggested that the use of beta adrenergic receptor blocking drugs in clinical practice may result in a reduced myocardial irritation especially under conditions where the activity of sympathetic nerves is increased. (Parratt, J. R., and Grayson, J.: *Myocardial Vascular Reactivity After Beta-Adrenergic Blockade*, *Lancet* 1: 338 (Feb.) 1966.)

CORONARY BLOOD FLOW Coronary blood flow (CBF) utilizing radioactive ^{86}Rb was 80.3 ml./min./100 g. tissue in normals and 56.8 ml. min./100 g. tissue in patients with hypertensive heart disease. The results agreed well with those utilizing the nitrous oxide technique. CBF was found to equal about 6 per cent of cardiac output in normal patients. Advantages of the ^{86}Rb technique were: (a) avoidance of coronary sinus catheterization; (b) average flow of entire myocardial mass is obtained; and (c) independence from prolonged steady state conditions. The main drawback relates to the radioactivity of ^{86}Rb which limits the maximum number of determinations in any one patient to two. (Donato, L.: *Measurement of Coronary Blood Flow by External Counting with Radioactive Rubidium*, *Circulation* 33: 708 (May) 1966.)

CORONARY BLOOD FLOW Diethyl ether exhibited little or no depressant action on coronary circulation in dogs at a light or moderate depth of anesthesia. Cyclopropane reduced cardiac output and left coronary blood flow in slight or moderate degree depending on the concentration inhaled, while the mean

arterial pressure was relatively well maintained during anesthesia, mainly because of slight or moderate increase in total peripheral resistance. Halothane and methoxyflurane exerted a profound depressant effect on the cardiovascular system. The higher the concentrations at which these two drugs were administered, the greater was the observed reduction in mean arterial pressure, pulse amplitude, heart rate, left coronary blood flow, cardiac output, stroke volume and left ventricular work. Protracted recovery of circulatory parameters from the profound depression following cessation of anesthesia was observed quite frequently in methoxyflurane anesthesia in contrast with halothane anesthesia. Statistically highly significant positive correlations were observed between left coronary blood flow and left ventricular work with all anesthetics and at all concentrations inhaled, while the left coronary blood flow showed less significant correlations with mean arterial pressure and cardiac output. (Saito, T., and others: *Coronary Circulation During Inhalation Anesthesia in Dogs* (Japanese), *Jap. J. Anesth.* 14: 815, 1965.)

ANGINA PECTORIS Iproveratril, a new coronary vasodilator was administered to a group of 30 aged patients (average age 80.4 years) suffering from angina pectoris. Its effect upon decreasing the number of nitroglycerin tablets required by each patient per week was compared to that of a placebo, using a double blind crossover technique. This vasodilator significantly decreased the number of nitroglycerin tablets required to relieve angina, with no appreciable changes in pulse rate, blood pressure or ECG. The actions of Iproveratril are similar to those of known beta-receptor blockers, however, it dilates the coronary bed at smaller doses than those required to obtain other sympathetic effects. (Neumann, M., and others: *Double Blind Evaluation of Orally Administered Iproveratril in Patients with Angina Pectoris*, *Amer. J. Med. Sci.* 251: 552 (May) 1966.)

CARDIAC RESUSCITATION The clinical and biochemical aspects of cardiac resuscitation were studied in 57 episodes of cardiac

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