Epinephrine and Norepinephrine by Sympathetic Nerves and Ganglia, Circulation 17: 366 (Mar.) 1958.)

PERIPHERAL VENOCONSTRICTION Peripheral venoconstriction is found in a cool environment or after local cooling. Arterial constriction precedes venoconstriction while venodilatation precedes arteriolar dilatation. Congestion of the legs resulted in prompt arteriolar constriction and venous pressure reduction followed by peripheral venoconstriction in the forearm. Relief of congestion resulted in venous pressure "overshoot," venodilatation, and arteriolar dilatation. Reduction in venous volume of the forearm suggests that the remaining blood volume was moved centrally by venoconstriction in the periphery which was more intense than that in the central veins. (*Wood, J. E., and Eckstein, J. W.: Tandem Forearm Plethysmograph for Study of Acute Responses of Peripheral Veins of Man, J. Clin. Invest. 37: 41 (Jan.) 1958.*)

CHRONIC ANEMIA The relationship between severe uncomplicated chronic anemia and the size of the heart was studied in dogs. A significant hypertrophy of the heart was present in the chronically anemic animals. The presence of edema was ruled out as a factor in the increase in heart size. The hypertrophy was found to involve both right and left ventricles and to be accompanied by dilatation of both chambers. (*Paplanus, S. H., Zbar, M. J., and Hays, J. W.: Cardiac Hypertrophy as Manifestation of Chonic Anemia, Am. J. Path. 34: 149 (Jan.–Feb.) 1958.*)

METHYLENE BLUE The respiration of non-nucleated erythrocytes may be greatly stimulated by the addition of methylene blue to the buffer system. Explanations offered for this phenomenon are: 1) increased oxidation of a degradation product of glucose, 2) oxidation of lactate, 3) increased reversible conversion of hemoglobin to methemoglobin, 4) and conversion of lactic acid to pyruvate. None of these explanations account for the magnitude of the increased respiration. *In vitro* experiments confirmed that oxygen consumption varied directly with increasing concentrations of dye, glucose utilization was increased, and lactic acid formation was decreased. They also indicated that methylene blue activates a cyclic glucose oxidative pathway in mammalian red cells (hexose monophosphate shunt). This mechanism accounts for as much as 85 per cent of the oxygen consumed by human erythrocytes in the presence of methylene blue. (*Brin, M., and Yonemoto, R. H.: Stimulation of Glucose Oxidative Pathway in Human Erythrocytes by Methylene Blue, J. Biol. Chem. 230: 307 (Jan.) 1958.*)

PRESSURE SUIT Inflation around the lower half of the body of a tightly fitting pneumatic suit at a pressure of 75 mm. of mercury produces an acute increase in pulmonary arterial and wedge pressures of about 25 mm. of mercury in normal subjects. In none of these eleven series of experiments on four subjects was the diffusing capacity of the lungs for CO_2 significantly altered. (*Lewis, B. M., Forster, A. E., and Beckman, E. L.: Effect of Inflation of Pressure Suit on Pulmonary Diffusing Capacity in Man, J. Appl. Physiol. 12: 57 (Jan.) 1958.*)

PULMONARY CIRCULATION Human subjects under normal and hypoxic conditions were studied during the infusion of acetylcholine into the pulmonary artery. The infusion resulted in a fall in pulmonary arterial pressure which was more evident after hypoxia had produced pulmonary hypertension. The fall in pressure was not associated with a decrease in cardiac output and there was no change in pulmonary wedge pressure, heart rate, systemic blood pressure, or central blood volume. Apparently, acteylcholine causes pulmonary vasodilatation which is more marked in the presence of an increased vascular tone. (*Fritts, H. W., Jr., and others: Effect of Acetylcholine on Human Pulmonary Circulation Under Normal and Hypoxic Conditions, J. Clin. Invest. 37: 99 (Jan.) 1958.*)

PULMONARY EMBOLISM Review of the literature fails to provide convincing evidence of important reflex effects of pulmonary embolism. In experiments on anesthetized dogs with pulmonary emboli produced by starch and glass beads,