Human Extremity—The Diversion Phenomena, Am. J. Cardiology 4: 566 (Nov.) 1959.)

HEART BLOCK Pertinent hemodynamic findings via right heart catheterization in six patients with acquired heart block and rates under 40 per minute were (1) elevated right atrial and right ventricular systolic pressure; (2) atrial systolic waves transmitted to both right ventricle and pulmonary artery successively; (3) giant atrial *a* waves occurring at the time of simultaneous atrioventricular systoles but not in or near early diastole of the preceding ventricular beat; (4) systolic pulmonary hypertension; (5) reduced mean brachial artery pressure, but elevated mean pulmonary artery pressure; (6) increased total vascular resistance of both the pulmonic and systemic circulation; (7) reduced oxygen consumption; (8) reduced cardiac index; (9) increase of stroke index to 28 per cent or less above normal in four of the six patients. Injection of Isuprel via a catheter in the main pulmonary artery resulted in two patients in (1) increased ventricular rate; (2) conversion to sinus rhythm in one; (3) unaltered stroke volume; (4) increased cardiac output; (5) oxygen consumption unchanged; (6) decreased arterio-venous oxygen difference; (7) decreased total vascular resistance in pulmonary and systemic circuits. (*Levinson, D. C., and others: Hemodynamic Findings in Heart Block with Slow Ventricular Rates, Am. J. Cardiology 4: 440 (Oct.) 1959.*)

ADRENAL HYPERTENSION Many mechanisms have been proposed for etiology of hypertension, particularly the essential. Current evidence points to increased importance of participation of adrenal cortical hormones in the pathogenesis of certain types of hypertension. Increased blood pressure is seen in about 85 per cent of patients with Cushing's syndrome and can be reversed by adrenalectomy and maintained at normal levels by replacement therapy with hydrocortisone and DCA; in some cases of primary aldosteronism; in other types of adrenal hypersecretory states; and frequently in long term administration of DCA, cortisone, ACTH, and other common synthetic steroids with mineral corticoid activity. Possible mechanisms of steroid hypertension are advanced: (1) electrolyte effects, *e.g.* sodium retention; (2) increased reactivity of blood vessels to epinephrine and/or norepinephrine due to either direct steroidal effect or by changes in electrolyte concentrations in blood vessel tissues; (3) adrenals may act as an intermediary link in development of essential hypertension since many patients may benefit from adrenalectomy and limited sympathectomy and not again become hypertensive when receiving replacement steroid therapy; (4) in essential hypertension adrenal steroid secretion may be only acting in form of a catalyst to permit some biochemical reactions necessary for development of hypertension; (5) possible imbalance of various steroid secretions. These are conjectural mechanisms and a definite clear cut pathogenesis of essential hypertension is still lacking. (*Mills, L. C., and Pontidas, E: Relationship of the Adrenal Cortex to Hypertension, Am. J. Cardiology 4: 719 (Dec.) 1959.*)

INTRA-ABDOMINAL PRESSURE Abdominal pressure of anesthetized dogs was elevated by the introduction of 18.5 mm. Hg compressed air through a cannula tied securely into the peritoneal cavity. Changes observed were: (1) Significant decreases in circulating plasma volume (T-1824); (2) Elevation of hematocrit and plasma protein concentrations; (3) Decrease in arterial pressure immediately upon elevation of the abdominal pressure, but these returned to pre-experimental levels prior to release of elevated abdominal pressure; (4) Lastly, a decrease in urine volume as well as a slight increase in serum potassium. Venous pressure in the great veins at the heart level was not increased. (*Jach, E. T., Marotta, S. F., and Marbarger, J. P.: Effect of Increased Intra-abdominal Pressure on Various Circulatory Parameters of the Anesthetized Dog, J. Appl. Physiol. 14: 940 (Nov.) 1959.*)

RHEOVASOGRAPHY An attempt was made to study the state of peripheral blood circulation in patients during surgery with the aid of the rheovasographic method. Using a special apparatus with a high frequency generator it is possible to record exactly the changing electric resistance of various sectors