

In contrast to the results obtained by occlusion plethysmography, it was found that intra-arterial infusions produced sustained increases in blood flow similar to intravenous infusions. The sustained dilatation of muscle vessels during intravenous infusion of epinephrine cannot be attributed entirely to secondary neural or humoral influences. However, it is not yet known to what extent these influences may be involved in addition to the local epinephrine effect. (*Golenhofen, K.: Sustained Dilatation in Human Muscle Blood Vessels under the Influence of Adrenaline, J. Physiol. 160: 189 (Feb.) 1962.*)

FOREARM BLOOD FLOW Forearm blood flow and forearm oxygen consumption with the extremity dependant were not significantly different from that with the extremity horizontal. Elevation of the forearm caused a significant decrease in blood flow and oxygen uptake. Forearm skin temperature did not vary with position of the extremity. These results suggest that variations in position of the upper extremity cause compensatory vascular reflexes. (*Abramson, D. I., and others: Effect of Altering Limb Position on Blood Flow, Oxygen Uptake, and Skin Temperature, J. Appl. Physiol. 17: 191 (Mar.) 1962.*)

RENAL BLOOD FLOW Pressure-flow relationships during reductions in renal artery pressure were studied in the dog kidney using a noncannulating electromagnetic flowmeter. When renal artery pressure was reduced by partial occlusion regulation was complete and flow was maintained at control levels at intravascular pressures above 70 mm. of mercury. Regulation was less complete from 50-70 mm. of mercury and absent below 50 mm. of mercury. Insignificant regulation of flow was found in the iliac bed using an identical experimental technique. These findings suggest the presence of an active, autoregulatory mechanism controlled by a sensitive feedback system for maintenance of renal blood flow. (*Schmid, H. E., and Spencer, M. P.: Characteristics of Pressure-Flow Regulation by the Kidney, J. Appl. Physiol. 17: 201 (Mar.) 1962.*)

INTRAOCULAR TENSION Pressures in the brachial artery, the retinal artery and intraocular pressure were measured when hypotension was induced by trimetaphan (Arfonad). Arterial pressure was lowered to about 45 mm. of mercury. A good correlation of respective pressures was found. Permanent retinal damage due to hypotension does not occur unless there is external pressure on the eyeball. Thrombosis of the central retinal artery after induced hypotension is due to severe changes in the wall of vessels. In order to avoid retinal damage, an abundant supply of oxygen should be provided. Blood pressure should not be dropped too rapidly and pressure on the eyeball should be avoided. Induced hypotension should not be used in patients showing vascular sclerosis. (*Haimboeck, K., and Steinber-eithner, K.: Pressure in the Retinal Artery and Intraocular Tension During Induced Hypotension, Der Anaesthetist 11: 99 (Mar.) 1962.*)

BLOOD PRESSURE CUFF A blood pressure cuff adjustable in width to 40 per cent of the arm circumference effectively eliminates the errors in measurement of blood pressure which are correlated to variations in arm size. Certain obese individuals, who are hypertensive by standard cuff measurements, will have normal readings with this cuff. Low readings of asthenic subjects may also be brought to or nearer normal ranges. (*Dasberg, H., Blondheim, S. H., and Sadovsky, E.: An Adjustable Blood Pressure Cuff to Correct Errors Due to Variations in Arm Circumference, Brit. Heart J. 24: 214 (Mar.) 1962.*)

BLOOD PRESSURE RECORDER In order to study blood pressure variations over relatively long periods of time under conditions of normal daily activity, a portable blood pressure recorder has been devised which weighs only five and one half pounds. It consists of a standard blood pressure cuff and bulb, a button microphone, an F-M pressure transducer with appropriate electronic adjuncts, a tape recorder and a twin-light signal system. The cuff and microphone are taped to the upper arm and the other equipment is contained beneath the shoulders in two holsters. An incidental finding was a con-