

an index to the ability of the heart to accept an inflow load. Left atrial pressure is more reliable than central venous pressure in making this distinction and left atrial pressure may be elevated to 30 cm. of water without fear of producing pulmonary edema. The physiologic significance of a normal arterial P_{CO_2} in a patient with obviously low cardiac output should be interpreted with caution. In this situation any significant amount of carbon dioxide may not be moved from the tissues to the lungs and upon resumption of a normal cardiac output the P_{CO_2} may rise above normal levels. Assisted ventilation is provided to any patient whose P_{O_2} falls below 100 mm. of mercury while in a high oxygen environment. (St. Ville, J. M.: *Physiologic Monitoring of Cardiac and Critically Ill Surgical Patients*, *Surg. Clin. N. Amer.* 47: 37 (Feb.) 1967.)

ANGIOTENSION Synthetic angiotension II (Hypertension) was infused into 39 patients. Mean arterial pressure rose in every instance. Small doses of angiotension produced no significant change in mean cardiac output; large doses consistently reduced cardiac output. Significant reductions in splanchnic (hepatic) and renal blood flow were produced by all doses tested. Treatment with atropine prevented the fall in cardiac output, but did not change the reduction in splanchnic and renal blood flow (the effects of angiotension on the renal circulation are not dependent upon reduced cardiac output). When cardiac output is maintained, angiotension may increase blood flow to areas other than splanchnic and renal, such as, perhaps, myocardium and brain. (Nolan, J. P., Cobb, L. A., and Thompson, J. L.: *Circulatory Responses to Angiotension in Man*, *Clin. Pharmacol. Therap.* 8: 235 (March) 1967.)

AORTIC ANEURYSM Of 200 consecutive patients with abdominal aortic aneurysm, 104 (Group I) underwent aneurysmectomy and 96 (Group II) did not (surgery refused, aneurysm nonresectable, or surgery contraindicated). Although the immediate (0-2 months) mortality was greater in Group I (13 per cent) than in Group II (9 per cent), the 1, 3 and 5 year cumulative mortality rates for Group I (12, 29, 37 per cent, respectively) are lower

than for Group II (39, 58, 65 per cent, respectively). In both groups, myocardial infarction and cancer accounted for more deaths than the operation or rupture of the aneurysm. From the experience in this series, it appears that resection of abdominal aneurysm favorably affects the patients prognosis although in the presence of complicating cardiovascular disease or cancer, operation presents a considerable risk. (Steinberg, I., and others: *Study of 200 Consecutive Patients with Abdominal Aneurysms Diagnosed by Intravenous Aortography*, *Circulation* 35: 530 (March) 1967.)

OPHTHALMIC-CEREBRAL BLOOD FLOW The blood pressure within the ophthalmic vessels can be approximated by applying an ophthalmodynamometer to the lateral aspect of the eyeball and visually sighting the optic nerve and central retinal artery with an ophthalmoscope. With the proper controls in force, increasing pressure exerted on the eyeball by the ophthalmodynamometer will first occlude retinal flow during diastole and then systole. Children premedicated with atropine and sedation were given halothane anesthesia and the depth of anesthesia was determined by electroencephalogram. With increasing depth of anesthesia, the retinal blood pressure fell despite a fairly normal systemic pressure, possibly the results of changes in cardiac output. Further investigation is being carried out in an attempt to correlate this technique with other means of measuring cerebral flow. (Farmati, O., and others: *Measurement of Retinal Artery Blood Pressure During Anesthesia in Children*, *South. Med. J.* 59: 1297 (Nov.) 1966.)

HYPERTHYROIDISM Five patients with hyperthyroidism were studied for cardiovascular and autonomic activity. The patients were given guanethidine for two weeks or longer and the studies were repeated. The hyperthyroid state was then brought under control by at least two months of treatment with propylthiouracil, followed by thyroidectomy or irradiation and again studies were repeated. The studies done included the urinary excretion of catecholamines, the arterial plasma catecholamines, the cardiac output, and oxy-

Downloaded from http://asa2.silverchair.com/anesthesiology/article-pdf/28/5/962/616840/0000542-1967/09000-00067.pdf by guest on 17 April 2024