

ing cerebral venous obstruction (superior vena cava) is emphasized by the presentation of six case histories. The EEG is probably the most sensitive and rapid indicator of the onset of venous obstruction. Signs suggestive of cerebral hypoxia suggest superior vena caval obstruction and the surgeon should be so informed by the anesthesiologist so that the obstruction may be corrected. (Paton, B., Percy, W. C., and Swan, H.: *Importance of Electroencephalogram during Open Cardiac Surgery with Particular Reference to Superior Vena Caval Obstruction*, *Surg. Gynec. Obst.* 111: 197 (Aug.) 1960.)

**CAROTID BLOOD FLOW** Quantitative and directional flow in the carotid systems of man were studied by means of a non-cannulating electromagnetic flowmeter. Following occlusion of the common carotid artery, blood flowed from the external to the internal carotid artery in 50 per cent of the cases, but the reverse was observed in the remaining 50 per cent. Head position and occlusion of the opposite carotid artery were each shown to have a pronounced effect upon the flow through the internal carotid artery. Studies on the effect of contralateral percutaneous carotid compression suggest that in acute situations a compensatory mechanism exists whereby flow through one carotid artery increases when that through the other is diminished. (Hardesty, W. H., and others: *Studies of Carotid-Artery Blood Flow in Man*, *N. Engl. J. Med.* 263: 944 (Nov.) 1960.)

**CEREBRAL VASO-DYNAMICS** Observations made through a "window" in the skull have shown that anaemia through blood loss leads to dilatation of the arterial and constriction of the venous bed: ligation of arteries supplying the brain or acute impairment of respiration cause dilatation of both the arteries and veins on the surface of the brain. Stimulation of the sympathetic nerve is accompanied by a fall of intracranial CSF pressure and marked diminution of cerebral volume with simultaneous dilatation of the venous bed. Administration of aminophyllin causes dilatation of the superficial cerebral arteries and intracerebral capillaries, leading to improved blood supply to nerve cells;

serpasil causes dilatation of both arteries and veins. Diagnosis of "cerebrovascular spasm" does not correspond to anatomical data since complete occlusion of even one intracerebral artery leads to death of the nerve cells and occlusion of large arteries produces focal necrosis. Transitory neurological signs taken to be the result of "cerebrovascular spasm" are most likely to be caused not by complete occlusion of the lumen but by strong constriction of the cerebral capillaries resulting from disorders of neuronal and humoral vasodilating innervation. (Klosovskii, B. N.: *General Problems of Pathology and Physiology of Cerebral circulation*, *Vestn. Akad. Med. Nauk SSSR* 7: 3, 1959.)

**AORTIC COARCTATION** Paradoxical postoperative hypertension immediately following resection for coarctation of the aorta is probably due to reflexes from aortic and carotid pressor receptors which were set at a high level preoperatively, and after surgery, with tension in the aortic wall reduced, may cease to act as buffers. Necrotizing arteritis is seen mainly in arteries below the site of coarctation and seems related to postoperative hemodynamic changes and the not infrequent delayed type of hypertension. (March, H. W., Hultgren, H., and Gerbode, F.: *Immediate and Remote Effects of Resection on Hypertension in Coarctation of Aorta*, *Brit. Heart J.* 22: 361 (June) 1960.)

**LOCALIZED HYPOTHALAMIC STIMULATIONS** By use of the Horsley-Clarke stereotaxic technique, a series of cats were subjected to hypothalamic electrical stimulation, chiefly in lateral and posterior positions. Electrocardiographic changes noted were marked alterations in QRS and T waves, bigeminal and trigeminal rhythms, A-V dissociation, extrasystoles, paroxysmal nodal and ventricular tachycardia, and the Wilson-Wolff-Parkinson-White configuration. (Weinberg, S. J. and Fuster, J. M.: *Electrocardiographic Changes Produced by Localized Hypothalamic Stimulations*, *Ann. Int. Med.* 53: 332 (Aug.) 1960.)

**SHOCK** With the aid of a newly devised technique employing a photoelectric drop-