

passes into and becomes impacted in the pulmonary arteries and capillaries rather than obstructing flow at the right ventricular outflow tract. Placing the patient in the left lateral decubitus position displaces the air to the apex of the ventricle and allows it to be churned up with blood, reaching the lungs at a much slower rate. (Zeft, H. J., and others: *Pulmonary Air Embolism During Insertion of a Permanent Transvenous Cardiac Pacemaker*, *Circulation* 36: 456 (Sept.) 1967.)

EEG AND CEREBRAL BLOOD FLOW

Eight-channel electroencephalogram monitoring during carotid endarterectomy performed in conscious patients under cervical-block anesthesia provides an accurate evaluation of cerebral blood flow. This method allows the selection of patients in whom an internal shunt should be used. It determines the length of the safe period available to the surgeon for insertion of the shunt and the proper size of the shunt to be used. EEG readings vary with the depth of general anesthesia. Possibly 75 per cent of the sensitivity is decreased by moderate general anesthesia. (Harris, E. J., and others: *Continuous Electroencephalographic Monitoring During Carotid Artery Endarterectomy*, *Surgery* 62: 411 (Sept.) 1967.)

CHEMORECEPTORS The activity in carotid body chemoreceptor afferent fibers has a rhythm with the same periodicity as respiration. This rhythm is not due to arterial pressure changes with respiration or to cyclical changes in pulmonary venous admixture. Rather, it is caused by changes in blood gas tensions during each respiratory cycle. The rhythm is modified by changes in respiratory frequency and volume. Fluctuations of arterial oxygen tension which have the same periodicity as respiration are shown to be conducted up the vertebral artery at least as far as the vertebro-occipital anastomosis. It is proposed that the chemoreceptor rhythm reflects the moment-to-moment changes in blood gas tensions. (Biscoe, T. J., and Purves, M. J.: *Observations on the Rhythmic Variation in the Cat Carotid Body Chemoreceptor Activity Which Has the Same Period as Respiration*, *J. Physiol.* 190: 389 (June) 1967.)

CHEMORECEPTORS Parallel recordings of cervical sympathetic and carotid body chemoreceptor activity have been made in the anesthetized cat. Sympathetic activity remains remarkably constant while chemoreceptor activity is varied by changes in arterial blood gas tensions. Changes in intrathoracic pressure by obstruction of the airway or thoracic compression were associated with changes in the activity of both nerves. It is likely that under normal conditions sympathetic nervous activity provides a stable vasomotor tone within the carotid body. (Biscoe, J. T., and Purves, M. J.: *Observations on Carotid Body Chemoreceptor Activity and Cervical Sympathetic Discharge in the Cat*, *J. Physiol.* 190: 413 (June) 1967.)

ELECTROANESTHESIA AND CIRCULATION

Cardiovascular reflexes in dogs were compared under electrical, pentobarbital and methoxyflurane anesthesia. Blood pressure dose-response curves were obtained using acetylcholine, epinephrine, and histamine before, during and after hemorrhage. Resting blood pressure was highest with electroanesthesia, intermediate with pentobarbital and lowest with methoxyflurane. Before transfusion, response to acetylcholine was greater in the dogs anesthetized with pentobarbital as compared with electroanesthesia. The response to epinephrine was greater in the methoxyflurane-treated dogs than in those anesthetized with either pentobarbital or electroanesthesia. There was no significant difference in the response to histamine with the various types of anesthesia. (Moss, C. M.: *Electroanesthesia: Comparison of its Cardiovascular Effects to Those of Pentobarbital and Methoxyflurane*, *Bull. Tulane Med. Fac.* 26: 226 (Aug.) 1967.)

SHOCK Early septic shock in patients who were normovolemic before bacteremia produced a syndrome characterized by hyperventilation, respiratory alkalosis, a high cardiac index, low peripheral resistance, high central venous pressure, elevated blood volume, hypotension, oliguria, warm and dry extremities, and arterial blood lactate accumulation. During serious illnesses cardiac outputs even two or three times normal may be necessary to provide adequate tissue blood flow. Hyper-