

tassium-induced cardiac arrest was employed as compared to nonarrested cases. It is not definitely known whether the enzyme release is due to a direct effect of potassium citrate upon the myocardium, to hypoxia, or to a combination of these factors. (Quinn, J. W., and others: *Transaminase Values Following Open-Heart Surgery*, *Ann. Surg.* 152: 45 (July) 1960.)

**SHOCK** Intravenous injection of lethal doses of endotoxin in anesthetized dogs produces a rapid decrease in total blood histamine, a concomitant rise in plasma histamine, and increased peripheral vascular responsiveness to histamine. Histamine apparently performs a crucial role in progressive development of hypotension after endotoxin is administered. (Hinshaw, L. B., and others: *Role of Histamine in Endotoxin Shock*, *Proc. Soc. Exp. Biol. & Med.* 104: 379 (July) 1960.)

**STARLING'S LAW** Transfusion of 1500 cc. of whole blood in the control state produces no significant change in central blood volume, an average elevation of cardiac output of .50 l. per minute and of left ventricular stroke work of 23 g.-m. The increase in each of these parameters resulting from transfusion during partial ganglionic blockade with Arfonad was substantially greater averaging 348 ml., 2.4 l. per minute and 73 g.-m., respectively. This suggests that when hypervolemia is induced acutely in intact man marked alterations in circulatory dynamics are prevented by the activity of the autonomic nervous system. This results in reflex venodilatation and depression of myocardial contractility, and accordingly, Starling's law of the heart cannot be readily demonstrated. When hypervolemia is induced after the activity of the autonomic nervous system has been reduced, more striking hemodynamic changes occur, resembling those in a Starling heart-lung preparation when venous inflow is augmented. (Frye, R. L., Braunwald, E., and Cohen, E. R.: *Studies on Starling's Law of Heart; Modification by Ganglionic Blockade*, *J. Clin. Invest.* 39: 1043 (July) 1960.)

**CEREBRAL BLOOD FLOW** A method employing  $Kr^{79}$  permits the rapid continuous estimation of total cerebral blood flow in man.

Cerebral blood flow determined by the  $Kr^{79}$  method and corrected for intracranial volume is significantly higher than the values obtained simultaneously with the nitrous oxide method. The results of the two methods are, however, significantly correlated. The  $Kr^{79}$  method is capable of following rapid changes in cerebral blood flow during unsteady states such as those induced by hyperventilation, carbon dioxide inhalation, or *l*-norepinephrine infusion. When combined with arteriovenous oxygen differences, the  $Kr^{79}$  method may be employed to follow changes in cerebral metabolic rate as well. (Lucas, B. M., and others: *Method for Continuous Measurement of Cerebral Blood Flow in Man by Means of Radioactive Krypton ( $Kr^{79}$ )*, *J. Clin. Invest.* 39: 707 (May) 1960.)

**INTRA-ARTERIAL TRANSFUSION** Intra-aortic injections of blood have been used in treatment of terminal states during operations and especially during thoracic operations when the aorta is easily accessible. Using X-ray control and 40-60 per cent solution of methiodal it was found that blood injected into the aorta enters the cerebral and coronary arteries. An injection of 50 ml. of the contrast medium is sufficient to fill the coronaries while 100 ml. is required in order to fill the cerebral arteries. The high degree of efficacy of the method was demonstrated in experiments on animals when intra-aortic injections of blood were given after clinical death had taken place. Intra-aortic injections were given to 40 patients; positive effect was observed in 33 (sustained in 13 and transient in 20 cases). (Karyukina, A. T.: *Intra-Arterial Injections of Blood in Experimental and Clinical Terminal States*, *Eksper, Khir.* 2: 58, 1959.)

**ESOPHAGEAL ECG LEAD** Seventy patients, aged 22 to 60 years, with hypertension were examined. The esophageal ECG lead has the advantage in demonstrating earlier axis deviations to the left (increased S wave and decreased R wave at all levels) and signs of slowing of intraventricular conduction (from 0.11 to 0.16 sec.). In 19 cases changes in the QRS-complex were only found in the esophageal lead, these changes being either absent or only slight in the other leads. Changes in the T wave (biphasic, negative or dimin-

shed) and increase of the P wave (in 13 cases) are also often shown in the esophageal lead. (Maslyuk, V. I.: *Oesophageal ECG Lead in Hypertensive Disease*, *Klin. Med. (Moskva)* 1: 98, 1958.)

**BRONCHOSCOPY** Bronchoscopy can be performed easily and atraumatically by the novice if the upper respiratory tract and larynx is first anesthetized and a nasotracheal catheter passed blindly. After the tracheobronchial tree is anesthetized via the catheter the bronchoscope is inserted in the usual manner using the catheter as a guide. (Thomas, D. E.: *Bronchoscopy Made Easy*, *Amer. Rev. Resp. Dis.* 82:1 (July) 1960.)

**POSTOPERATIVE PSYCHOSIS** In the majority of 24 postoperative patients, the psychic disorder (alimentary-delirious, hallucinatory-paranoid syndromes, residual delirium, etc.) developed acutely on the second to fourth day after operation and lasted for several days to 2 months. In all cases the main cause of the psychosis was the surgical operation, as both severe psychic and physical trauma. The necessity is stressed of taking into consideration the personality and the psychic make-up of the patient in the pre- and postoperative period. The subsequent following of a protective regime and the establishment of contact between patient and surgeon are of great importance. The widespread use of chlorpromazine (1-2 ml. of a 2.5 per cent solution intramuscularly or 50 mg. internally) in surgical practice is necessary. Chlorpromazine has a general tranquilizing action and will prevent the development of postoperative psychoses. (Shabanov, A. N., Tselibeev, B. A., and Sharipova, S. A.: *Psychic Disturbances Associated with Surgical Operations*, *Sov. Med.* 1: 64, 1959.)

**SCIATIC NERVE INJURY** Serious sciatic nerve injury can result from injections of commonly used antibiotics and other agents into the buttock, especially in infants and young children. The usual presenting complaint is paralytic foot drop, but this is frequently misdiagnosed as a congenital lesion or the result of unrecognized poliomyelitis. Diagnosis is confirmed by the demonstration

of sensory loss and anhydrosis over the distribution of sciatic nerve branches. Surgical exploration of the buttock reveals marked scarring in and about the sciatic nerve. Recovery is poor in this important, preventable type of peripheral nerve injury which probably occurs more commonly than is usually supposed. The preferred site of injection, when the intramuscular route must be used, should be the mid-anterior aspect of the thigh, with the quadriceps muscle as the recipient area. This affords a greater muscle mass than the relatively small area of the upper outer gluteal quadrant. (Combes, M. A., and others: *Sciatic Nerve Injury in Infants*, *J.A.M.A.* 173: 1336 (July 23) 1960.)

**EPIGLOTTITIS** Epiglottitis in children is generally abrupt in onset and often progresses from the first symptoms to a fatal respiratory obstruction in four to six hours. The respiratory difficulty is chiefly inspiratory obstruction, although expiratory stridor is also present, particularly if the larynx is involved. There is no true hoarseness, the characteristic sound of the voice being described as "muffled." Frequent swallowing motions are present, and the patient may gag and vomit. The patient exhibits the classic signs of air hunger. The epiglottitis is greatly enlarged, with intense redness and edema. If complete airway obstruction occurs, placement of a large intravenous needle (13 or 15 gauge) into the trachea or sublaryngeal area will probably maintain a life-sustaining airway until definitive therapy can be established. Relief of the respiratory obstruction is the prime objective of therapy, and early tracheotomy is frequently indicated. (Vetto, R. R.: *Epiglottitis*, *J.A.M.A.* 173: 990 (July 2) 1960.)

**HYPGLOSSAL PARALYSIS** Endotracheal anesthesia of more than five hours for correction of aortic isthmus stenosis with the patient in right lateral position was followed by paralysis of the recurrent laryngeal and hypoglossal nerves. The surgery might have contributed to the paralysis of the recurrent nerve but pressure of the endotracheal tube is believed to have been responsible for the damage to the hypoglossal nerve. There was gradual recovery of all symptoms. (Konrad,