

rest consequent to coronary and cerebral embolism. These pressure tracings confirm Kouwenhoven's observation that a pulse is transmitted to the limbs, but it is conceded that a pressure pulse is not necessarily proof of blood flow. That the blood flow was adequate is presumed from the patient's speedy recovery from the cerebral lesion. The need for a prepared mind in the successful treatment of cardiac arrest is re-emphasized. Five phases are listed: (1) Lower the head; raise the legs; thump the precordium. (2) Closed-chest cardiac massage; mouth-to-mouth lung insufflation. (3) Tracheal intubation and artificial respiration from an anesthetic rubber bag. (4) Record the electrocardiogram to determine the nature of the arrest. (5) Apply definitive treatment to the arrested heart. (Nixon, P. G. F.: *The Arterial Pulse in Successful Closed-Chest Cardiac Massage*, *Lancet* 2: 844 (Oct. 14) 1961.)

**EXPIRED AIR RESUSCITATION** Clinical observations on 1,500 patients showed that with mouth-to-mouth breathing the stomach was inflated as a rule. With mouth-to-nose breathing this occurred only in rare instances. Since regurgitation of gastric contents would introduce an additional complication during expired air, resuscitation mouth-to-nose breathing is preferred. (Ruben, A.: *Considérations sur la Respiration Artificielle d'Urgence*, *Acta Anaesth. Belg.* 11: 298 (Dec.) 1960.)

**ARTERIAL OCCLUSION** Short periods of occlusion of the vascular supply to the forearm in man produced an oxygen debt in both deep and superficial tissues. This oxygen debt was repaid by both increased blood flow and increased extraction of oxygen from blood during the period of reactive hyperemia following resumption of circulation. Results suggested an absence of delicately balanced and efficient checks on mechanisms governing repayment of the oxygen debt incurred during atrial occlusion. (Abramson, D. I., and others: *Effect of Short Periods of Atrial Occlusion on Blood Flow and Oxygen Uptake*, *J. Appl. Physiol.* 16: 851 (Sept.) 1961.)

**MESENTERIC OCCLUSION** Superior mesenteric arteries of dogs were clamped. All

control dogs died; 25 per cent of dogs given epidural block lived. Late autopsies showed that the blocked dogs developed extensive collateral circulation. Epidural block was thought to relieve vasospasm and promote collateral circulation. (Liang, H., Bernard, H. R., and Dodd, R. B.: *Effect of Epidural Block upon Experimental Mesenteric Occlusion*, *A. M. A. Arch. Surg.* 83: 409 (Sept. 1961.)

**CEREBRAL CIRCULATION** Cerebral blood flow remains remarkably constant in the face of broad changes in arterial blood pressure and cardiac output, and it is only when blood pressure is lowered to half or less of normal value or cardiac output decreased by more than a third that cerebral perfusion becomes inadequate. Within these broad limits cerebral blood flow is then regulated by intrinsic factors, principally cerebrovascular tone. This, in turn, depends chiefly on chemical influences, viz., the respiratory gas content of the blood, and only slightly upon neurogenic influences. The most marked dilatation of cerebral vessels results from an increase in blood  $P_{CO_2}$ , and sharp vasoconstriction with a reduced cerebral blood flow is caused by a lowered blood  $P_{CO_2}$ . Moderate changes in blood  $P_{O_2}$  do not affect cerebral blood flow, but markedly lowered blood  $P_{O_2}$  will greatly increase cerebral blood flow and increased blood  $P_{O_2}$  will moderately reduce cerebral blood flow through vasoconstriction. Only marked elevation of intracranial pressure will result in reduced cerebral blood flow. (Sherkin, H. A., and Novack, Paul: *Control of the Cerebral Circulation*, *J. A. M. A.* 178: 396 (Oct. 28) 1961.)

**FIBRINOLYSIS** The intravenous injection of some pressor amines (epinephrine, norepinephrine, and phenylephrine) in man results in fibrinolytic activity as measured by the euglobulin lysis technique and whole plasma lysis time. Such activity could be repeatedly recalled or maintained by constant infusion. (Genton, E., and others: *Fibrinolysis Induced by Pressor Amines*, *Amer. J. Med.* 31: 567 (Oct.) 1961.)

**THROMBOLYSIS PREVENTION** Certain operations have been known to produce

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