

retention and potassium excretion was isolated four years ago and named aldosterone. Recently a definite correlation between a lowered sodium/potassium urinary ratio and an increased urinary aldosterone concentration (presumably reflecting increased adrenocortical production) has been demonstrated. The state of postoperative aldosteronism provides a rational basis for restraint in the use of saline, since the resultant overloading contributes to postoperative nausea and malaise, edema in the wound and lung bases and to intracellular "sodium-shift" (replacement by sodium of potassium normally present intracellularly in order to maintain osmolarity). It is likely that, in patients exhibiting "postoperative acute adrenocortical insufficiency," normal postoperative aldosteronism is absent; and, when aldosterone is available for clinical purposes, it will deserve a trial in the treatment of this syndrome to see whether it is as effective as, if not more than, hydrocortisone. (Llaurado, J. G.: *Clinical Implications of Postoperative Transient Aldosteronism*, *J. A. M. A.* 167: 1229 (July 5) 1958.)

GUILLAIN-BARRE SYNDROME FOLLOWING SPINAL ANESTHESIA Nine days following spinal anesthesia for gastrectomy a patient developed Guillain-Barre Syndrome, starting with numbness of the tongue, shoulders and arms and progressing to complete paralysis. Tracheotomy and respirator care lead to complete recovery. (Orringer, D.: *Gastrectomy Complicated by Guillain-Barre Syndrome*, *A. M. A. Arch. of Surg.* 76: 447 (Mar.) 1958.)

THORACIC SURGERY Using Dr. Noel Gillespie's detailed punch card records, a review of recorded experience with anesthesia for thoracic surgery from 1941 to 1955 is presented largely in tabular form. The changing fashion from cyclopropane to nitrous oxide and supplements can be seen. The change in types of operations performed, progressive increase in duration of operation and in complications experienced are illustrated in a series of three worthwhile articles. (DeKornfeld, T., Gale, J., and Bamforth, B.: *Fifteen-year Study of Anesthesia for 6301 Cases*

of Thoracic Surgery, *A. M. A. Arch. of Surg.* 76: 914 (June) 1958; and Bamforth, B., Gale, J., and DeKornfeld, T.: *Fifteen-year Study for 2186 Cases of Pulmonary Resection*, *A. M. A. Arch. of Surg.* 76: 914 (June) 1958; and DeKornfeld, T., Gale, J., and Bamforth, B.: *Factors Concerned in Incidence of Death in 2186 Cases of Pulmonary Resection*, *A. M. A. Arch. of Surg.* 76: 914 (June) 1958.)

ANALGESIA TECHNIQUE Inhalation of 100 per cent oxygen, controlled respiration and mild depression with thiopental sodium and Demerol are a recommended method of anesthesia for cardiac surgery. Relaxant drugs are used only for intubation. Gentle manipulations by the surgeon while working within the thorax make it possible to manage the patient in an analgesic state during which the patient is able to obey simple commands. (Bailey, P., Gerbode, F., and Garlington, L.: *Anesthetic Technique for Cardiac Surgery which Utilizes 100 Per cent Oxygen as the Only Inhalant*, *A. M. A. Arch. of Surg.* 76: 437 (Mar.) 1953.)

MASS CASUALTIES When mass casualties occur the scarcity of trained anesthetists as well as other physicians will necessitate supervision of several technicians by an anesthesiologist. Simplified techniques (open ether or chloroform) will be necessary and perhaps regional or local anesthesia if syringes are available. Short cuts and compromises will be necessary to permit treatment of the greatest number of casualties per unit of time. (Ziperman, H.: *Principles in Surgical Management of Mass Casualties*, *A. M. A. Arch. of Surg.* 77: 1 (July) 1958.)

CHRONIC ANEMIA The anemia of chronic blood loss is due to a deficiency of iron. Liver, vitamin B¹², folic acid, and other vitamins are of no known value. Transfusions are justified only if: (1) the rate of bleeding is rapid, (2) immediate operation is important, or (3) the anemia subjects the patient to a risk exceeding that of transfusion. Iron, not blood transfusion, is the treatment of choice for patients with the anemia of chronic blood loss who are scheduled for elective operations. (Beutler, E.: *Preoperative Man-*

agement of Blood Loss Anemia, Surg., Gynec. & Obst. 106: 734 (June) 1953.)

NORADRENALINE A man in shock from myocardial infarction was treated with an intravenous infusion of noradrenaline 1:100,000. The blood pressure responded to this treatment and was maintained at about 110/70 for 68 hours after which the pressor drug was not required. A total of 44 mg. of norepinephrine was infused. From the fourth to the sixth day after admission, patches of gangrene appeared on both hands and both feet. Thereafter, gangrene developed in both midforearms and both midcalfs. The patient died 14 days after admission. (Greenbaum, D.: *Gangrene of the Extremities Following Cardiac Infarction and Noradrenaline Therapy*, *Lancet* 1: 1103 (May 24) 1958.)

ANESTHESIA MACHINE A new midsize portable model anesthesia machine, oxygen inhalator and resuscitator is now available. Anesthesia can be induced quickly and maintained for periods of 3 to 20 minutes in obstetric, pediatric, dental and traumatic cases by administering a nonexplosive mixture of 40 per cent cyclopropane, 30 per cent oxygen and 30 per cent helium from thumb-sized cylinders. Resuscitation and brief periods of oxygen therapy can be accomplished by using the small (3,400 cc.) 100 per cent oxygen cylinders. The machine is easily refilled or disassembled for cleaning, and its miniature size permits it to be conveniently carried in a physician's satchel. (Hingson, R. A.: *Western Reserve Anesthesia Machine, Oxygen Inhalator and Resuscitator*, *J. A. M. A.* 167: 1077 (June 28) 1958.)

BLUE CROSS While approving rate increases for Pennsylvania Blue Cross plans, the State Insurance Commissioner ruled that the Blue Cross plans must solicit assistance of hospitals, hospital councils, and other interested persons in exploring all areas to determine where economies can be made. He based his ruling on testimony obtained during an eighteen-day hearing in which abuses of Blue Cross plans were brought out. (*State Seeks to Regulate*

Hospital Costs, *Mod. Hosp.* 90: 51 (June) 1955.)

BRACHIAL PLEXUS BLOCK During the supraclavicular brachial plexus block: (1) The anesthesiologist should stand at the patient's head. This position is suitable for repeated blocks if necessary during surgery. (2) The needle should be inserted at the midpoint of clavicle just lateral to the subclavian artery. When properly placed the needle is "rocked" by the arterial pulsations. (3) Nesacaine is the anesthetic agent preferred, 1 per cent for selective sensory anesthesia and 2 per cent for sensory and motor anesthesia. (Ansbro, F., and others: *Brachial Plexus Block*, *Am. J. Surg.* 95: 953 (June) 1958.)

INTRAOSSEOUS ANESTHESIA A total of 92 reductions were performed. To the forearm or thigh a rubber bandage was applied, if possible with the limb elevated. The anesthetic was injected through a special needle into the spongiosa at a depth of 0.5-1 cm.; for anesthesia of the forearm and hand, 15-22 ml. of a 2 per cent solution of novocaine was used, and for anesthesia of the leg, 25-30 ml. The injection sites used were the olecranon process, the distal epiphysis of the bones of the forearm, the medial condyle of the tibia and the calcaneus. Anesthesia developed after 7-12 minutes. There were no complications. This method can be used irrespective of the length of time after injury. (Abramov, Y. G.: *Intraosseous Local Anesthesia in Treatment of Closed Fractures of Bones of Limbs*, *Nov. Khir. Arkh.* 5: 29 1956.)

TOPICAL ANESTHESIA Chilling the skin with an ice cube of 1:1,000 aqueous Zephiran gives quick, painless, superficial anesthesia plus antiseptics. (Zimmerman, M. G.: *Anesthesia and Antiseptics with Benzalkonium Chloride (Zephiran) Ice Cubes*, *A. M. A. Arch. Dermat. & Syph.* 77: 122 (Jan.) 1958.)

OBSTETRIC ANESTHESIA If good anesthesia service is going to be rendered to the more than four million mothers giving birth in the United States each year, better cooperation is needed between