thermia of muscles increases neuromuscular blockade due to depolarizing drugs and attenuates that due to tubocurarine. Comparable results were obtained in humans with the depolarizing drugs but results with tubocurarine were inconsistent. This was thought to be due to inadequate recordings and the inconsistency is now being eliminated. (*Zaimis, E., Cannard, T. H., and Price, H. L.: Effects of Lowered Muscle Temperature upon Neuromuscular Blockade in Man, Science 128: 34 (July 4) 1958.*)

**RELAXIN** While relaxin cannot influence uterine contractions of labor, alter the subjective pain of labor, or alter the normal progress of labor, relaxin can cause a reduction of blood pressure in patients with hypertension and toxemia. (*Decker, W. H., and others: Some Effects of Relaxin in Obstetrics, Obst. & Gynec. 12: 37 (July) 1958.*)

**PULMONARY EDEMA** Experimental pulmonary edema produced by ventilation with chlorine gas was studied in 250 rats. Morphine was found to significantly decrease the degree of pulmonary edema. Aerosols of 5 per cent silicone antifoam suspension and 25 per cent alcohol solution were less effective. Nembutal, atropine, Demerol and Phenergan were ineffective in decreasing the edema. (*Polli, J. F., and Musiker, B. S.: Effect of Morphine, Aerosol Mixtures, and Other Agents on Experimental Pulmonary Edema in Rats Following Exposure to Chlorine Gas, Exper. Med. & Surg. 16: 73, 1958.*)

**PULMONARY EDEMA** Experimental and clinical (cardiac catheterization) data proved that for acute pulmonary edema to develop, the presence of factors other than increased pulmonary pressure is necessary. Those factors are endogenous and exogenous and include pain, emotion, various medicinal substances, ether inhalation, trauma during cardiac surgery etc. Injection of hexamethonium in cases of acute pulmonary edema developing in mitral stenosis patients during operation resulted in rapid regression of the edema. Hexamethonium lowers the pressure in the pulmonary circulation and at the same time causes vasoconstriction, which blocks the occurrence of reflex vascular reactions. In patients under anesthesia a smaller than usual dose of hexamethonium is sufficient. It is concluded that a neurogenic factor forms the basis of acute pulmonary edema in cases of mitral stenosis; acute pulmonary edema is, therefore, a generalized pathological state with severe reflex neurogenic disturbances. (*Marinesku, V., and Ionesku-Buzhor-Karus: Mechanism of Acute Pulmonary Edema in Mitral Stenosis, Vestn. Khir. 77: 23, 1956.*)

**MYASTHENIA GRAVIS** If curare is given to a patient with latent myasthenia gravis during surgery, a true myasthenic crisis may occur. Maintenance of both an adequate airway and adequate ventilation is essential. Antibiotics help to prevent pneumonia. Tensilon is the antidote of choice during the initial treatment and neostigmine is indicated for maintenance. (*Warren, D., Eastwood, D., and Muller, W.: Myasthenia Gravis and Curare, Am. J. Surg. 96: 102 (July) 1958.*)

**THYROID** The relationship between thyroid and adrenal cortical function was studied in a group of patients with either thyrotoxicosis or primary myxedema. Plasma cortisol levels were normal in most of these patients. Infused steroids disappeared more rapidly from the plasma in thyrotoxicosis and more slowly in myxedema. Therapy of the thyroid disease returned the metabolism of the infused steroids to normal. The rate of synthesis of cortisol was reduced in myxedema and increased in thyrotoxicosis. Institution of the euthyroid state in these patients returned adrenal cortisol production to normal. These data suggest that there is a homeostatic mechanism which results in a decreased synthesis of cortisol in patients with myxedema in whom the rate of removal of cortisol by the liver is impaired, and an increased synthesis of cortisol in patients with thyrotoxicosis in whom the rate of removal of cortisol by the liver is accelerated. (*Peterson, R. E.: Influence of Thyroid on Adrenal Cortical Function, J. Clin. Invest. 37: 736 (May) 1958.*)

**POSTOPERATIVE ALDOSTERONISM** An adrenocortical hormone with a remarkable activity for promoting sodium

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** 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.) 1958.*)

**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. (*Zierman, 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 $B^{12}$, 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-*