burns as they interfere with reflex control of various vital functions, especially respiration and circulation of blood, and inhibit the defensive-adaptive reactions of the organism. (*Kochetygov, N. I.: The Place of Hypothermia and Neuroplegic Drugs in the Treatment of the Shock Accompanying Severe Burns, Vestn. Khir. 79: 91 1957.*)

SURGICAL RISK Decision for or against surgical intervention in a patient with heart disease depends more on the surgical indication than upon the heart disease. The danger of sudden death during surgery is very high in patients with the higher grades of auriculoventicular block, particularly when associated with symptoms of cerebral insufficiency. Types of heart disease that are notoriously poor risks include syphilitic and rheumatic disease of the aortic valve. Patients with hypertensive heart disease, congenital heart disease and rheumatic valvular disease of the mitral valve tolerate surgical operation well. (*Imaher, C. C.: Medical Evaluation of Surgical Risks in Elective and Emergency Surgery, Surgical Clinics of N. A., p. 1181 (Oct.) 1958.*)

JUDGEMENT IN ANESTHESIA The febrile, toxic dehydrated child tolerates inhalation anesthesia poorly and often has convulsions. Elective operation in any patient is contraindicated when level of hemoglobin is below the arbitrary amount of 9 to 10 grams per 100 ml. All elective operations should be postponed for individuals with acute upper respiratory tract infections in spite of treatment with antibiotics. Any child to be anesthetized for suture of a bleeding tonsillar fossa should be assumed to have blood in the stomach. Time must be provided, with almost no exception, for the anesthesiologist to make some sort of an estimate of every patient. The process of balancing the favorable and the unfavorable, the likely and the unlikely, can be called judgment. (*Oech, S. R., and Dripps, R. D.: Judgement in Anesthesia, Surgical Clinics of N. A., p. 1205 (Oct.) 1958.*)

THERMOREGULATION In cool air (18 to 20 C.) a normal volunteer and a patient with a spinal lesion at the level of the eighth thoracic vertebra maintained constant body temperature by cooling of the extremities and a rise in metabolism due to shivering. Subjects with a spinal lesion in the cervical area cooled rapidly because shivering raised metabolism by only 50 per cent and the extremities remained warm. Cervical-lesion patients exposed to hot air, 35 to 37 C., did not sweat; rectal temperatures rose rapidly to 38.5 C. in 1½ hours. (*Guttmann, L., and others: Thermoregulation in Spinal Man, J. Physiol. 142: 406 (Aug. 6) 1958.*) (*Abstractor's note:* The need for careful observation of the temperature of patients with cervical cord lesions in the operating room would appear necessary.)

HYPOTHALAMUS Electrolytic lesions in the hypothalamus of the rat selectively disturbed tropic hormone secretion in the adenohypophysis with corresponding effects on the target endocrines. Basal lesions in the anterior hypothalamus usually resulted in obesity, ovarian atrophy and reduced thyroid function. Paramedian lesions in the dorsal hypothalamus diminished thyroid activity without morphologic change in the ovary. Adrenal atrophy was not consistently produced even after marked hypothalamic damage. The role of the hypothalamus in the hypothalamic-hypophyseal-thyroid system is that of a modulator: it effects quantitative adjustments in the system by modifying production and release of thyroid stimulating hormone from basophils. The interplay between thyroid and anterior pituitary is controlled by the level of circulating thyroid hormone. (*D'Angelo, S. A., and Traum, R. E.: An Experimental Analysis of the Hypothalamic-hypophyseal-thyroid Relationship in the Rat, Ann. New York Acad. Sc. 72: 239 (Oct. 10) 1958.*)

ESOPHAGEAL SPHINCTERS In the resting state, the upper end of the esophagus is shut by an air tight mechanism which yields to pressures of variable magnitude. Normally it withstands a minimum pressure of 5–15 cm. water; but when patients with respiratory paralysis are treated with positive pressure breathing, levels as high as 15–25 cm. can be applied without causing gastric distension. Manometric evidence suggests that two striated muscles, cricopharyngeus and circular upper esophageal, contribute to the mechanism. The