

*ration of Apnea in Man, J. Pharmacol. & Exper. Therap.* 120: 203 (June) 1957.)

**CURARE** When topically applied to the exposed central nervous system of the cat, *d*-tubocurarine is shown to block preferentially the inhibitory synapses of the spinal cord and brain stem reticular system. This drug potentiates the action of strychnine at these sites and also the indirect development of cerebellar tetanus. (Parpura, D. P., and Grundfest, H.: *Physiological and Pharmacological Consequences of Different Synaptic Organizations in Cerebral and Cerebellar Cortex of Cat, J. Neurophysiol.* 20: 494 (Sept.) 1957.)

**NEUROMUSCULAR BLOCK** Experiments indicate that neuromuscular block produced by acetylcholine and succinylcholine is due mainly to desensitization, that is, a condition in which the end-plate has become refractory to depolarizing agents, and from which it recovers only slowly after complete withdrawal of the drug. It is suggested that this change arises from gradual transformation of the drug-receptor compound into an inactive form. (Katz, B., and Thesleff, S.: *Study of Desensitization Produced by Acetylcholine at Motor End-plate, J. Physiol.* 138: 63 (Aug. 29) 1957.)

**CURARE ANTAGONISTS** Potentiation of acetylcholine and antagonism of tubocurarine by three antagonists was investigated. The time-effect curves were casually related to the differences in the kinetics in the inhibitor-cholinesterase combination and dissociation. (Smith, C. M., Mead, J. C., and Unna, K. R.: *Antagonism of Tubocurarine; Time Course of Action of Pyridostigmine, Neostigmine and Edrophonium in Vivo and in Vitro, J. Pharmacol. & Exper. Therap.* 120: 215 (June) 1957.)

**HYPOXIA** Adrenalectomized dogs with a total preganglionic sympathetic block were made hypoxic by breathing 2.7 per cent oxygen. This group was compared with a normal group made hypoxic by breathing the 2.7 per cent oxygen. The unblocked animals showed an even greater increase in serum lactate and potassium

than the blocked animals, indicating the role of epinephrine and norepinephrine in producing a more pronounced effect under the stress of hypoxia. (Greene, N. M., and Phillips, A.: *Metabolic Responses of Dogs to Hypoxia in Absence of Circulating Epinephrine and Norepinephrine, Am. J. Physiol.* 189: 475 (June) 1957.)

**STRESS ADAPTATION** Although the sympathoadrenal and adrenocortical systems exhibit many similar peripheral sites of action, one cannot be substituted for the other in the regulation of adaptive reactions. Epinephrine will not restore blood pressure to normal in adrenocortical insufficiency; nor will cortical steroids prevent the postural hypotension of sympathectomy or sympathetic blockade. Following an intensive review of the action and interrelationship of the sympathoadrenal and the adrenocortical systems, the conclusion is that physiologically they appear to operate largely as a single functional unit. (Ramey, E. R., and Goldstein, M. S.: *Adrenal Cortex and Sympathetic Nervous System, Physiol. Rev.* 37: 155 (April) 1957.)

**CORTISONE** The effect of cortisone on the healing of aortic homografts was studied in dogs. The cortisone did not affect the healing or the incidence of thrombosis in the grafts. The size of the thrombus was larger in the dogs receiving cortisone. (Kroboth, F. J., and others: *Effects of Cortisone on Healing of Aortic Homografts, Surgery* 42: 347 (Aug.) 1957.)

**ALDOSTERONISM** Postoperative transient aldosteronism occurs in patients following surgery who also have sodium retention and potassium loss. By the time the sodium-potassium ratio in the urine returns to normal, the aldosterone concentration has also returned to normal. Increased production by the adrenal cortex and decreased destruction by the liver may be the cause of postoperative transient aldosteronism. (Glaurodo, J. G., and Woodruff, M. F. A.: *Postoperative Transient Aldosteronism, Surgery* 42: 313 (Aug.) 1957.)

**LIGHTING** Lighting engineers suggest special filters for surgical luminaries to

reduce radiant heat and provide color correction; provision for automatic switch-over to auxiliary power during a general power failure; and use of a variable voltage transformer so amount of light can be altered with need. Use of adequate cool white fluorescent lamps for room lighting in the operating room and recovery room and more widespread use of properly shielded ultraviolet lights to reduce the spread of air-borne infection is urged. (Haynes, H., and Staley, K. A.: *Reflections on Hospital Lighting*, *Mod. Hosp.* 89: 120 (July) 1957.)

**HYPNOSIS** A series of 41 patients was treated with hypnosis. Success was attained in about 90 per cent, which is the usual figure quoted for ability to induce hypnosis by any one therapist. In this series the psychosomatic cases—that is, patients with asthma and eczema—responded well to suggestion and hypnotic psychotherapy. (Stewart, H.: *Some Uses of Hypnosis in General Practice*, *Brit. M. J.* 1: 1320 (June 8) 1957.)

**HYPNOSIS** Of 120 patients treated by hypnosis, 23 were failures. Cases of asthma in children, dysmenorrhea, duodenal ulcer, petit mal, cardiac neurosis, and skin affection gave the best results. (Fry, A.: *Scope for Hypnosis in General Practice*, *Brit. M. J.* 1: 1323 (June 8) 1957.)

**ANESTHESIA FOR AMBULANT PATIENTS** Light surgical anesthesia without respiratory depression can be produced with intravenous meperidine premedication plus 4 mg./kg. of methoxyallyl phenoxyacetic-diethylamid (not a barbiturate) administered intravenously and inhalation of nitrous oxide and oxygen. The patients awaken in four minutes after the injection, and in 20 to 30 minutes they can leave the clinic without having had any nausea or vomiting. (Frey, R.: *Anaesthetist* 6: 170, 1957.)

**ERYTHROBLASTOSIS** As transfusions to women before and during the childbearing period increase in number, erythroblastosis due to anti-C, anti-E and anti-Kell antibodies will increase. Hence,

transfusions to a woman in this age group should be limited to those situations in which the benefit outweighs the loss of her future children. Although we cannot prevent sensitization owing to pregnancy, we can prevent most sensitization due to transfusion. (Chown, B.: *On Erythroblastosis: Prevention is Better Than Cure, If You Can Cure It*, *Postgrad. Med.* 22: 107 (July) 1957.)

**BIRTH INJURY** At least some of the spastic and athetoid forms of cerebral palsy are caused by birth injury. A generalized fall in systemic blood pressure, while obviously augmenting a compression injury, of itself produces cerebral atrophy characteristically localized to the zone between two main arterial fields of supply. Anoxia, if sufficiently severe, ultimately leads to sudden circulatory collapse adequate to explain such lesions. (Norman, R. M., Ulrich, H., and McMenemey, W. H.: *Vascular Mechanisms of Birth Injury*, *Brain* 80: 49 (March) 1957.)

**MORTALITY** Recent statistics show that patients with arteriosclerotic heart disease without occlusion are subject to a mortality rate two and a half times greater than that of standard risks. With coronary occlusion (after three months survival) the mortality rate is increased four times. (Lew, E. A.: *Some Implications of Mortality Statistics Relating to Coronary Artery Disease*, *J. Chronic Dis.* 6: 192 (Sept.) 1957.)

**MORTALITY RATE** During the period 1946 to 1952 the postoperative mortality from thyroid crisis was 9.1 per cent following thyroidectomy under local and general anesthesia on 66 patients with toxic goiter at the Heidelberg University Hospital. From 1953 to 1955 the mortality rate has been zero after operations on 20 patients under endotracheal barbiturate, curare, nitrous oxide anesthesia. This success is attributed to "vegetative blocking" with individual doses of the following drugs—reserpine, procainamide, meperidine, promethazine, Hydergine, thiopental, Luminal, magnesium and Pyramidon. (Kolb, E.: *Langenbecks Arch. u. Dtsch. Ztschr. Chir.* 286: 18, 1957.)