

ratio for anesthetic effect. It is clear that, because higher concentrations of anesthetic are necessary to anesthetize children, the risks of hypotension greater, and changes more rapid, continuous attention is necessary.

References

1. Deming, M. V.: Agents and techniques for induction of anesthesia in infants and young children, *Anesth. Analg.* 31: 113, 1952.
2. Litchfield, J. T., Jr., and Wilcoxon, F.: A simplified method of dose-effect experiment, *J. Pharmacol. Exp. Ther.* 96: 99, 1949.
3. Eger, E. I., II, Saidman, L. J., and Brandstater, B.: Minimum alveolar anesthetic concentration: A standard of anesthetic potency, *ANESTHESIOLOGY* 26: 756, 1965.
4. Hill, D. W.: Production of accurate gas and vapor mixture, *Brit. J. Appl. Physics* 12: 410, 1961.
5. Sadove, M. S., Becka, D., and Gibbs, F. A.: *Electro-encephalography for Anesthesiologists and Surgeons*. Philadelphia, J. B. Lippincott Co., 1967.
6. de Jong, R. H., Hershey, W. N., and Wagman, I. H.: Measurement of a spinal reflex response (H-reflex) during general anesthesia in man. Association between reflex depression and muscular relaxation, *ANESTHESIOLOGY* 28: 382, 1967.
7. Saidman, L. J., Eger, E. I., II, Munson, E. S., Babad, A. A., and Muallem, M.: Minimum alveolar concentrations of methoxyflurane, halothane, ether and cyclopropane in man. Correlation with theories of anesthesia, *ANESTHESIOLOGY* 28: 994, 1967.
8. Fingl, E., and Woodbury, D. M.: In Goodman, L. S., and Gilman, A. (eds.): *The Pharmacological Basis of Therapeutics*. New York, Macmillan, 1965, pp. 20-23.
9. Trevan, J. E.: The errors of determination of toxicity, *Proc. Roy. Soc. (Biol.)* 101: 483, 1927.
10. Saidman, L. J., and Eger, E. I., II: Effect of N_2O and of narcotic premedication on the alveolar concentration of halothane required for anesthesia, *ANESTHESIOLOGY* 25: 302, 1964.
11. Munson, E. S., and Bauers, D. L.: Effects of hyperventilation on the rate of cerebral anesthetic equilibration, calculations using mathematical model, *ANESTHESIOLOGY* 28: 377, 1967.
12. Kennedy, C., and Sokoloff, L.: An adaptation of the N_2O method to the study of the cerebral circulation in children: Normal values for cerebral blood flow and cerebral metabolic rate in childhood, *J. Clin. Invest.* 36: 1130, 1957.
13. Larson, C. P., Jr., Eger, E. I., II, and Severinghaus, J. W.: The solubility of halothane in blood and tissue homogenates, *ANESTHESIOLOGY* 23: 349, 1962.

Drugs

SUCCINYLDICHOLINE The negative inotropic effect of barbiturates on the isolated heart of the guinea pig can be decreased by the positive inotropic effect of succinylcholine. Succinylcholine prevents cardiac arrest from barbiturate doses twice the usual arrest doses. The decrease of heart rate following the injection of barbiturates is less pronounced if succinylcholine is added. These findings may help to explain the beneficial effect of succinylcholine immediately following induction of anesthesia with barbiturates in cardiac patients. Possible explanations are the blocking action of barbiturates on the preganglionic synapses of the sympathetic and parasympathetic systems or that the depression of the myocardium by barbiturates prevents response to the cholinergic effect of succinylcholine. (Droh, R., and Horst, J.: *The Influence of Succinylcholine on Myocardial Insufficiency following Barbiturates*, *Der. Anaesthetist* 17: 301 (Sept.) 1968.)