

complications, (c) possibility of explosions with x-ray apparatus. . . . Nitrous oxide can be administered safely and satisfactorily. It must be avoided when sufficient relaxation cannot be achieved without some degree of hypoxemia. . . . The frequency of pre-existing systemic disease requires that ether be used with caution. . . . Ether may often be the agent of choice for patients with heart disease. Cyclopropane has many advantages for this group of patients. . . .

"Local infiltration, if done properly, will secure pain relief at the operative site. Complete muscular relaxation, however, may not always be obtained. Excessive sedation is likely to be required. Pain, restlessness, and agitation may not only lengthen the operative procedures, but may become a factor in the onset of shock. There are some stolid patients to whom these objections do not apply. Spinal anesthesia will provide muscular relaxation but the patient is still conscious and may become restless and disturbed. . . . Avertin . . . is a basal anesthetic and must be followed by an additional agent. Postoperatively, because of its slow detoxification, there is a more prolonged period of sleep and inactivity, which is not desirable in the elderly patient, since this predisposes to respiratory morbidity. . . . The use of intravenous anesthesia with the rapidly acting thiobarbiturates . . . does not invariably provide good muscular relaxation, depresses respiration, and must be detoxified in the body. Its use has not generally been advised for lengthy procedures in elderly patients, as the total dosage required may be relatively large. Combination of several agents probably adds no safety to this operative procedure. . . . Regional, rectal, and intravenous anesthetics possess the advantage of being non-inflammable or nonexplosive. Inhalation agents are either inflammable, explosive, or aid combustion. X-ray

equipment is part of the surgical setup. . . .

"The role of preoperative sedation cannot be overemphasized. Morphine and scopolamine in the ratio of 1:25 is ordinarily a good choice. Dosage should be moderate to avoid the excessive depression so easily obtained in the elderly. Morphine should be given cautiously to diabetic and asthmatic patients. A short-acting barbiturate may be added for apprehensive patients. Recent observations suggest the use of Demerol in places of morphine. . . . In this series [173 cases] all fatalities averaged 6.3 per cent, and what seems striking is a 3.7 per cent death rate for those cases done with inhalation anesthesia. . . . With careful anesthetic management, operation under inhalation anesthesia was well tolerated by these elderly people. There were no deaths in the operating rooms. Postoperative morbidity was low and the rate of mortality favorable. No attempt was made to select this group for special care or supervision. . . . Anesthesia in the aged remains a serious problem. Progress has been achieved by developing general medical care and specific surgical techniques. Further improvement is likely if anesthetic management is based on the physiological requirements of the patient, and knowledge of the effects of the anesthetic agents in the presence of pre-existing disease. In this group of patients inhalation anesthesia seemed to meet these requirements." 6 references.

J. C. M. C.

KRANTZ, J. C., JR.; CARR, C. J.; HORNEY, A. G., AND EVANS, W. E., JR.: *Anesthesia: IX. The Anesthetic Action of Isopropenyl Vinyl Ether*. *J. Pharmacol. & Exper. Therap.* 79: 179-185 (Oct.) 1943.

"In a former communication the authors reported studies on the anesthetic

properties of cyclopropyl vinyl ether (cyprethylene ether). . . . Continuing our studies of similar ethers as anesthetic agents, our attention was directed to an isomer of cyprethylene ether, namely, isopropenyl vinyl ether. . . . Propethylene ether involves no great difficulties in its synthesis and has physical properties admirably suited for a volatile anesthetic. It is a volatile, colorless liquid with a characteristic ethereal odor; the boiling point is 55° C. and the specific gravity 0.786 at 20° C. . . . Isopropenyl vinyl ether (propethylene ether) . . . is a volatile liquid exhibiting anesthetic properties when administered by inhalation to various species of animals. Propethylene ether exhibits an anesthetic potency which approximates chloroform and an anesthetic index more than twice that of ethyl ether. In the monkey, propethylene ether produces no functional liver damage as shown by the bromsulfalein test. In [our] . . . experiments in the rat, dog and monkey anesthetics propethylene ether produced no significant histopathological changes in certain viscera. The monkey's heart showed no significant electrocardiographic changes under anesthesia with propethylene ether. The anesthetic concentration in the blood under surgical anesthesia is approximately one-fifth that of ethyl ether. The blood pressure of the dog is lowered by anesthetic concentrations of propethylene ether. The explosive range of concentrations of propethylene ether and ethyl ether with air appears to be about the same. This first approximation of the pharmacology of propethylene ether, in our opinion, warrants its careful and judicious trial in man by skilled anesthetists." 6 references.

J. C. M. C.

HERBERT, W. E.: *Acrylic Resin Restorations and Ether Anaesthesia*. Brit. Dent. J. 75: 259 (Nov. 19) 1943.

"It has been suggested that acrylic resin restorations in the mouth are likely to be damaged if the patient subsequently has ether administered as anaesthetic. In order to test the truth of these statements two highly polished acrylic resin teeth were exposed to ether and trilene vapour during the course of several anaesthetics, covering in all a period of three hours, at Guy's U. S. A. Hospital, Seal, Kent, by Mr. A. Shein. This was done in circumstances in which the teeth received the full concentration of ether and trilene vapour. In neither case was the polish in any way impaired nor the material softened."

J. C. M. C.

MOREY, G. W.: *Bloodless Tonsillectomy under Local Anaesthesia*. Lancet 2: 794-796 (Dec. 25) 1943.

"Since my postgraduate days in Vienna I have performed more than 2300 tonsillectomies under local anaesthesia, and, with my present technique, claim that 90 per cent of the operations are completely bloodless, while in the remaining 10 per cent there is rarely more than eggcupful of blood lost. The essential principle of this operation is the injection of a very large quantity of 'Novutox'. . . . First, the anaesthetic properties are so great that the patient experiences no pain at all; secondly, it acts as a perfect haemostatic; and thirdly, by its quantity alone, it forces the tonsil from its bed, forming an intervening layer of oedematous tissue."

J. C. M. C.

GRIFFITH, H. R.: *The Use of Curare in Anaesthesia and for Other Clinical Purposes*. Canad. M. A. J. 50: 144-147 (Feb.) 1944.

"The so-called 'true curare substance' was separated from various