

creased the incidence of asphyxia when used beyond safe limits of potency. Nitrous oxide or ethylene used to safe limits and then supplemented by a more potent agent gave the most favorable results. Cyclopropane and other more potent inhalation agents increased the incidence in proportion to the degree of tissue saturation. Complications of pregnancy and labor, particularly those necessitating operative delivery, increase the incidence of fetal asphyxia. . . . Asphyxia neonatorum may be the result of the complications of pregnancy and labor. It frequently involves poor diagnosis and management of the existing conditions by the obstetrician. It often involves the misapplication of depressant drugs through the failure of the anesthetist and obstetrician to recognize the physiologic disturbances and changes involved in the progress of labor, thus acquiring the relief of pain at the expense of safety. The choice of an anesthetic agent is not as important as its proper administration and individualization to the existing obstetric conditions. It cannot be emphasized too strongly that only by close cooperation between the obstetrician and the anesthetist can the mother and child be safeguarded against the hazards of childbirth." 6 references.

J. C. M. C.

ALLEN, FREDERICK M.: *Intravenous Obstetrical Anesthesia; Preliminary Report*, Am. J. Surg. 70: 283-290 (Dec.) 1945.

Adapting a procedure used by Lundy and by the Canadians Gordon and McLachlin, the author has set out to demonstrate to his own satisfaction that procaine has a selective affinity for tissues which are inflamed or whose capillaries are otherwise abnormally permeable, when the drug is administered intravenously. In his series of cases, Allen has achieved two grades of analgesia. One is a mere numbing

of peripheral sensation which is considered adequate in the second stage when pain is not too severe. Concentrations of 0.8 per cent procaine given usually at about 0.5 to 3 cc. per minute were enough, and the guide to the upper limit of dosage was the absence of subjective symptoms of dizziness or confusion. Rapid flows of 5 to 12 cc. per minute were used for the severe pain of actual delivery and repair. At these rates, fogging of consciousness was the rule. There were a few minor convulsive manifestations with these rapid flows, easily stopped by decreasing the rate of flow sharply. Prevention of these motor phenomena with preliminary barbiturate medication is not conclusively proven.

W. A. C.

ADAMS, R. C.: *Principles of Intravenous Anesthesia with Pentothal Sodium*. S. Clin. North America. Mayo Clinic Number 788-791 (Aug.) 1945.

"Many of the questions which are asked relative to the use of pentothal sodium anesthesia reflect the fact that the broad principles of its use are still not thoroughly understood. . . . Intravenous anesthesia is linked closely to both the principles and practices which govern the administration of anesthetic agents in general. Most of the difficulties and fatalities associated with intravenous anesthesia have risen from failure to appreciate this fact. . . . In the first place, pentothal sodium is a barbiturate. Although it has the desirable characteristic of being ultrashort acting, due to its rapid destruction in the body, nevertheless it exhibits many of the characteristics common to derivatives of barbituric acid in general. . . . Induction of anesthesia should be slow. . . . It is almost impossible to estimate beforehand how much of the barbiturate will be required to produce the optimal level of anesthesia for a particular patient. Consequently there is

only one way to do this: that is—by small, slowly administered doses. . . .

“The total dose of pentothal must be kept within reasonable limits if the advantage of its shortacting qualities is to be obtained. . . . If these standards are not maintained, trouble is likely to ensue. . . . Perhaps one of the most important observations in connection with pentothal anesthesia is that a patient's tolerance to the drug is lowered by traumatic and surgical shock, debility, toxemia and imitating conditions. . . . It often has been said that one of the advantages of intravenous anesthesia was that little or no equipment was necessary for its successful administration. Such statements are not only misleading but have resulted in many unfortunate experiences in the hands of those who believed them. The idea that general anesthesia produced by the intravenous administration of the anesthetic agent is fundamentally different from general anesthesia induced by inhalation or that it carries with it less possibility of untoward side effects is incorrect. This fact must be both understood and acknowledged by those who wish to employ intravenous anesthesia successfully. All of the difficulties associated with inhalation anesthesia are possible under intravenous anesthesia. These complications have to do chiefly with the airway, respiratory exchange and oxygenation of the patient. They need not be any more serious under intravenous anesthesia than under inhalation anesthesia provided the equipment for taking care of such difficulties is available. . . . The use of oxygen or oxygen and nitrous oxide has now become almost routine procedure from the beginning to the end of intravenous anesthesia. . . . Flexibility also has been increased by using local, regional or spinal anesthesia as a supplement or complement to the intravenous method. . . .

“Intravenous anesthesia is not as suitable for certain operations as for

others. In general the most unsuitable are extensive, intra-abdominal, intrathoracic and intracranial operations, operations about the nasal, pharyngeal and laryngeal passages and operations in which the position of the patient or the nature of the lesion predisposes to respiratory obstruction. However, the use of special methods, such as endotracheal intubation or supplemental regional anesthesia, may make intravenous anesthesia feasible and perhaps even desirable in some of these more extensive surgical interventions. . . . The advantages of pentothal sodium anesthesia are many. It should be used in such a way that its desirable features are always paramount.”

J. C. M. C.

BARFOOT, R. J.: *Continuous Caudal Obstetrical Analgesia*. *Arizona Med.* 2: 366-370 (Nov.) 1945.

“The last four years have seen the development of many different techniques, tricks, and embellishments in technique in the administration of continuous caudal obstetrical analgesia. . . . Although having observed and studied this method extensively in two outstanding clinics in the middlewest, my own personal experience with the method in private practice has been meager. I have used continuous caudal analgesia in only six obstetrical cases. It was quickly learned that the method is very impractical in war times when hospital personnel, and the physician's time are so much at a premium. The results obtained in this very small sampling are in keeping with statistics at large.”

J. C. M. C.

CLARK, S. S.: *Obstetrical Anesthesia*. *Kentucky M. J.* 43: 308-312 (Nov.) 1945.

“The choice of obstetrical anesthesia has been the basis of severe controversy in both the field of obstetrics and anesthesia. The altered physiology and