

stage anesthesia was between 5 and 10 minutes' duration. The babies breathing in less than 30 seconds have dropped to 42.8 per cent, those in one minute to 63.2 per cent. Mild asphyxia is more than double (21.4 per cent), and severe asphyxia is nearly four times as great (15.1 per cent) as in the group receiving only first and second stage anesthesia. 124 cases received between ten and fifteen minutes of third stage anesthesia. Only 25.8 per cent breathed in less than 30 seconds, and only slightly over half (52.4 per cent) within one minute. Nearly 30 per cent were mildly asphyxiated and 17.7 per cent severely asphyxiated. Exactly 100 cases received third stage anesthesia of more than fifteen minutes' duration. Only 22 per cent of those babies breathed in 30 seconds and only 45 per cent in one minute. Practically one-third (32 per cent) were severely asphyxiated. . . .

"All of the operative cases other than low forceps were removed from the series and the data reanalyzed. The results found are almost identical. Accordingly, it is not the operative procedure, but the anesthetic, which causes the delayed respiration. . . . There can be no question that ether given to the mother bears a direct quantitative relationship to the establishment of respiration in the baby. . . . Particularly to be condemned is the common practice of holding the mother under deep anesthesia until the doctor arrives or scrubs up. It is infinitely better to let the greenest intern handle the situation or permit the patient to precipitate than to stop labor by anesthesia. It is strongly indicated that an increased number of operative procedures, when these are necessary, should be carried out under spinal or local anesthesia, or that new anesthetic agents be sought which do not so profoundly affect the baby."

J. C. M. C.

CEBALLOS, ALEJANDRO: *An Operation Performed in one Stage with Inhalation Anesthesia for Hydatid Cysts of the Lung, Free of Adhesions.* J. Thoracic Surg. 12: 553-565 (Aug.) 1943.

"In our actual experience, twenty-four operations have been performed on twenty patients. . . . Neither suffocation, hemorrhage, nor emphysema have been noted as the result of hyperpressure anesthesia. We have also observed that the patients with multiple hydatid cysts who have been operated upon in different stages have tolerated the anesthesia with hyperpressure without affecting the other cysts existing in the lung. This is worthy of mention and consideration because while we operated on one cyst we might fear that the increase of bronchial pressure would influence the cyst in the same lung or even in the other lung. If we wish hyperpressure to be effective it is necessary to use intratracheal intubation. If not, the gas administered at a pressure of 15, 18, or 20 mg. of mercury may pass through the pharynx producing distention of the stomach. In our experience we have seen that hyperpressure through the simple facial mask does not distend the lung so completely as when the administration is carried out through a tracheal tube. Hyperpressure administered in cases of hydatid cysts of the lung presents some problems not encountered in other pulmonary diseases at the time of operation, because the cyst is filled with liquid and is subject to the changes of increased bronchial pressure. It is necessary, therefore, to graduate the hyperpressure and use it with caution. We have not observed the complication which is not uncommon in these cases, namely, suffocation from vesicles expelled into the mouth or dispersion of the vesicles into the pleura. With intratracheal inhalation

anesthesia the operations are usually easy and uneventful. . . .

"When we have localized the cyst and have placed the patient in the position for operation, the anesthetic is administered, first with a simple mask; then, when the patient is asleep, a tube is placed in the trachea by way of the nose. This is done easily and usually without trouble. If there are, however, certain obstacles caused by deviations in the anatomy of the nose, or any other reasons, the tube may be introduced through the mouth, which is equally simple. The intubation is usually done when the patient is asleep, but sometimes it is done when the patient is awake, following local anesthesia to the pharynx. There are still surgeons who carry out the operation in this way. . . . After the ribs are resected, the pleura is opened and at that moment the anesthetist, to diminish the intrapulmonic pressure, permits a slight pneumothorax. . . . Once the precise localization of the cyst is established the lung is again distended and there is usually no need to surpass 18 mm. of mercury in pressure. . . . The lung is kept inflated and if there are any bronchi of sufficient caliber to affect the intrapleural pressure, opening into the cyst, it is convenient to increase the intrabronchial pressure." 12 references.

J. C. M. C.

FOLDES, F. F., AND BEECHER, H. K.: *The Effect of Cholesterol Administration on Anesthesia*. J. Pharmacol. & Exper. Therap. 78: 276-281 (July) 1943.

"In the early years of the present century considerable interest was aroused in relationships existing between lipoids and anesthetic agents by the extraordinary findings of Meyer and Overton and their immediate followers. . . . In 1936, Starkenstein and Weden published a paper discussing

the influence of cholesterol administration upon the activity of hypnotic and anesthetic agents. The purpose of the present study is to repeat in part the experiments of Starkenstein and Weden, and to obtain sufficient data to establish the fact of an additive or potentiating effect of certain lipoids on anesthetic action not only in the case of a volatile lipid soluble anesthetic agent, ether, but also in the case of a non-volatile agent, a barbiturate (pentobarbital sodium). . . . We have confirmed for ether and a barbiturate the principal conclusion of Starkenstein and Weden that the depth and duration of anesthesia can be greatly increased by the previous injection of cholesterol. The cholesterol effect appears to be a potentiation; the possibility that it may be additive cannot be eliminated at this time. In searching for an explanation of the cholesterol action one must look beyond physical solubility and transport effects: (a) Both olive oil and cholesterol increase the effectiveness of ether, but only cholesterol increases the effectiveness of the barbiturate. Olive oil has no effect on the barbiturate. (b) Ether has the same order of solubility in both cholesterol and lecithin: yet the cholesterol increases the anesthetic effect of ether (and the barbiturate) while the lecithin does not." 6 references.

J. C. M. C.

QUERIES AND MINOR NOTES: *Sudden Death and Anesthesia—Fundamentals of Anesthesia*. J. A. M. A. 122: 1215-1216 (Aug. 21) 1943.

"To the Editor:—A white woman aged 21, whose weight was 110 pounds (50 Kg.), requested a tonsillectomy. Her past history was negative except that she had always been nervous. . . . The patient was given morphine sulfate  $\frac{1}{8}$  grain (0.008 Gm.) and atropine sulfate  $\frac{1}{200}$  grain (0.00032 Gm.) one-half hour before operation. Induction