

patients can be accomplished under inhalation anesthesia. Our choice in these cases was cyclopropane and oxygen.

"The anesthesiologist contributed only a small part to the care of the Texas City disaster victims. The important fact is that the anesthesia services rendered were vital. These services are organized to cooperate with all other general and specialty groups in the University of Texas Medical Branch." No references.

E. J. G.

WILLIAMS, O. C.: *Intravenous Ether (Diethyloxide) Used in the Treatment of Cases of Impending Gangrene and Impaired Circulation*. New Orleans M. & S. J. (Apr.) 1948.

Stimulated by the work of Katz on the use of ether intravenously in the treatment of impending ischemic gangrene, the author used the method in 22 cases of a similar nature. A 2½ per cent solution of ether was used, the daily dose being 25 cm. of stock ether in 1000 cm. of 5 per cent glucose or normal saline solution. A series of 12 such injections constituted a course of treatment.

Thorough studies, including numerous laboratory tests, were done on all cases before and after a course of treatment. No detrimental effects were demonstrated.

The 22 cases included thromboangiitis obliterans, diabetic ischemic limb, arteriosclerosis, hypostatic ulcer, neurodermatitis and neuritis. Good results were obtained in 17 cases, fair results in 3 cases and poor results in 2 cases. The only side effects from treatment were emesis (2 cases) and extravasation of solution (1 case).

Relief from pain was one of the most gratifying findings. The treatment was not unpleasant to the patient and was considered safe in the dilution of

ether used. It can be given while patients are being prepared for surgery, if and when this becomes necessary. The author considers ether given intravenously a valuable agent if cases are carefully observed and evaluated prior to treatment. 1 reference.

C. C. L.

FINO, J. A., AND EISAMAN, J. R.: *Combined Local Infiltration Anesthesia and Pentothal Sodium Anesthesia in Cesarean Sections*. Am. J. Obst. & Gynec. 55: 887-890 (May) 1948.

The authors have combined local anesthesia and nitrous oxide analgesia with intravenous pentothal sodium in cesarean sections. Pentothal sodium is of choice because of its rapid, smooth induction and its relative safety as an anesthetic agent when properly used.

In such complications as placenta previa, toxemias, fetal distress and disproportion, in the presence of an upper respiratory infection, the authors have used a simplified technic of local infiltration anesthesia associated with intravenous pentothal sodium.

One per cent novocaine with adrenalin is used. The operative site is directly infiltrated with novocaine to include the dermis. Subcutaneous tissues are infiltrated down to the fascia; the fascia is infiltrated. The skin is incised to the fascia, hemostasis assured and the fascia incised. The recti muscles are infiltrated laterally to the outer borders of their sheaths. The peritoneum is directly infiltrated with novocaine. The peritoneum is incised and the preperitoneal tissues laterally, including the posterior portion of the rectus sheath, are again infiltrated. Upon exposure of the uterus, pentothal anesthesia is started and the uterus opened.

The technic was applied to a group of 40 patients. The length of time from the beginning of the infiltration

of novocaine and the extraction of the child varied from nine to thirty minutes. The average amount of pentothal used was 12.4 grains.

Atropine sulfate, gr. $\frac{1}{50}$, was the only premedication in 17 cases. Demerol plus scopolamine was given in the majority of the remaining cases. Nitrous oxide analgesia in small amounts with continuous oxygen was used during the operation with all the patients.

A mild laryngospasm occurred in 1 patient. There was no fetal or maternal mortality. In 2 cases there was delayed fetal respiration. No references.

C. A. H.

HERRICK, F. L.: *Pentothal Sodium Anesthesia for Cesarean Sections*. Am. J. Obst. & Gynec. 55: 883-886 (May) 1948.

At Grace-New Haven Community Hospital from 1942 to 1946 there were 492 cesarean sections performed using pentothal as the sole agent until after delivery. Supplementation of equal parts of nitrous oxide and oxygen after the delivery was used.

A 2.5 per cent solution is used. Induction is quick, quiet and pleasant. Surgery may be started in one to one and a half minutes after the induction of anesthesia.

Pentothal passes through the placenta, reaching equal concentration in fetal and maternal blood with ten to twelve minutes. There is a period of five to eight minutes before the drug reaches the fetus in high concentration. In the author's cases the time from the start of anesthesia to delivery of the baby is 8.83 minutes. The average time of reaction of the mother is 28.7 minutes. There were no maternal deaths and 2.7 per cent of the cases had mild atelectasis. There were 3 per cent fetal deaths. Seventy per cent of the infants cried spontaneously. Thirty

per cent were resuscitated by means of suction plus oxygen under pressure.

In cases where over 500 mg. of pentothal was used for delivery of the baby, the operation was completed under cyclopropane and oxygen. 2 references.

C. A. H.

TEAGUE, R. S., AND PERDUE, MERVIN: *The Effect of Ether and Dial-Urethane Anesthesia on the Passage of Sulfathiazole into the Cerebrospinal Fluid*. J. Pharmacol. & Exper. Therap. 92: 277-282 (Mar.) 1948.

The factors which control the permeability of the barrier between the blood and cerebrospinal fluid have not yet been elucidated. It is generally recognized that the barrier to certain drugs or dyes may be lowered during high fever, in acute inflammation of the meninges, and after traumatic injury to the central nervous system.

The recent studies of Wallace and Brodie on the passage of bromide and iodide ions into the cerebrospinal fluid, indicate that the extracellular fluid of the central nervous system is of greater importance as a source of cerebrospinal fluid than previously recognized. Attention should be directed towards the meningeal and intracerebral blood vessels, as well as the choroidal vessels, in considering factors concerned with the production of cerebrospinal fluid and the passage of substances from the blood into the cerebrospinal fluid.

Accordingly, the experiments reported were undertaken in order to determine whether ether anesthesia, which produces cerebral vasodilatation and increases brain blood flow, is accompanied by an increase in the penetration of a foreign substance into the cerebrospinal fluid. These findings were compared with dial-urethane anesthesia.

The passage of sulfathiazole from the blood to the cerebrospinal fluid