

before operation. No morphine is given. Pentothal solution 2½ per cent is used. The injection must be slow. Intravenous infusion of 1,000 cc. of physiological salt solution is started simultaneously with the anesthetic. Oxygen is administered during the time of anesthesia.

Infants under 4 years of age, adults whose veins are difficult to engage and patients presenting advanced azotemia are not suitable subjects for pentothal anesthesia. Allergic reactions to pentothal, anemia, hypotension and shock are contraindications. Obstructive diseases of the upper respiratory tract also contraindicate use of the drug.

At Southern Pacific General Hospital and St. Mary's Hospital in San Francisco, major surgical interventions on the genito-urinary tract were done on 96 patients, and 59 operations of shorter duration, all under pentothal anesthesia. There were no deaths or accidents. 11 references.

F. A. M.

MILNE, M. L. AND YOUNGER, E. R.: *Relief of Pain in Childbirth*. Brit. M. J. 2: 16 (July 5) 1947.

In a series of 25 cases the method of administering phenobarbitone and rectal ether for relief of pain in childbirth was tried. The technique was outlined in 1945 by C. B. Lull and R. A. Hingson. In each of the 25 patients relief of pain was experienced. None of the babies was affected by the sedation and every child cried immediately at birth. The method was found to be safe, easy to administer and it did not prolong labour. 1 reference.

F. A. M.

PROSKAUER, C.: *The Simultaneous Discovery of Rectal Anesthesia by Marc Dupuy and Nikolai Ivanovich Pirogoff*. J. Hist. Med. & Allied Sc. 2: 379-384 (Summer) 1947.

Coincidences occur in every field of endeavor. It is not generally known that the administration of ether by rectum was first suggested simultaneously by two persons in widely separated parts of the world. On March 16, 1847, a manuscript was read at a session of the Académie Nationale de Médecine in Paris by Marc Dupuy. The title of the manuscript was "Note sur les effets de l'injection de l'éther dans le rectum." The work of Marc Dupuy was presented to the Académie des Sciences in Paris on April 5, 1847.

At the April 27 session of the Académie Nationale de Médecine a manuscript-letter written by Nikolai Ivanovich Pirogoff was presented. The title of his paper was "Sur l'administration de la vapeur d'éther par le rectum."

Pirogoff was a noted surgeon and his report reached the entire medical world. The idea of rectal anesthesia was most closely associated with his name. Marc Dupuy, "interne des hopitaux," unknown then did not enjoy Pirogoff's opportunities. He remained silent although his paper is dated exactly six weeks before that of Pirogoff. No biographical lexicon has anything to say concerning Marc Dupuy's life or achievements. 14 references.

F. A. M.

SHACKLETON, R. P. W.: *The Treatment of Pulmonary Complications in Maxillo-Facial Injuries*. Anaesthesia 2: 145-149 (Oct.) 1947.

Of 324 men with facial wounds who were admitted to a maxillo-facial unit from June 7 to October 31, 1944, 256 had wounds involving the naso-, oro- or laryngo-pharynx. Of these 256 cases, 123 showed physical signs of disease in the lungs on admission. Marked absence of pneumonia was probably due to the short time since wounding and to the routine use of penicillin.

Bronchial aspirations and atelectasis probably developed during transfer due to the impossibility of proper nursing care. The anoxic emergency took precedent over anything else and tracheo-bronchial toilet was performed as soon as possible. Postural coughing and breathing exercises were performed twice a day on patients whose general condition was good and whose surgical condition permitted. Postural drainage was resumed postoperatively for as long as any retained secretions were detectable in the chest. A vigorous course of treatment was arranged by the physiotherapists. The results justified the severity of the technique and no untoward effects were noticed.

Of the 256 patients, 7 died and 11 developed severe pulmonary infections but recovered. 5 references.

F. A. M.

SHANE, S. M.; KALTREIDER, D. F., AND COHEN, H. M.: *Dilute Solution. Catheter, Continuous Spinal Analgesia for Labor and Delivery. A Preliminary Report.* Am. J. Obst. & Gynec. 54: 488-495 (Sept.) 1947.

The first dilute solution continuous spinal anesthetic was administered (by S. M. S.) in October, 1944. After the use of a ureteral catheter to replace the malleable needle was suggested by Tuohy, the method of dilute solution continuous spinal analgesia was continued, using a catheter instead of a needle with shield. By the use of this method the complications of continuous caudal analgesia, and the undesirable features of spinal analgesia have been overcome. The anesthetic solution which is injected is so dilute that no somatic sensory effect could be detected. There was little or no motor paralysis involving the musculature of the thorax, abdomen, or extremities. The pain of labor contractions was abolished with solutions of pontocaine

in glucose diluted to 0.05 per cent wherein $\frac{1}{2}$ mg. per cc. was injected approximately once an hour. The patients were able to lie in any desired position and were able to move onto the delivery table without experiencing painful cramps of uterine contractions.

For the actual delivery the use of the dilute solution is discontinued and a more concentrated solution injected. A second syringe containing 4 mg. of pontocaine in 2 cc. of glucose replaces the syringe which contained the more dilute solution. The table is placed in reverse Trendelenburg position and the more concentrated solution is injected slowly.

In this series of 50 cases there has been no increase in operative or mid-forceps deliveries as a result of the anesthesia. There were no fetal or maternal deaths, no failures to enter the subarachnoid space or to introduce the catheter. There were no neurological sequelae. Postspinal headaches were not increased over the number one would expect in a similar series of patients who had spinal anesthesia, for general surgical procedures. There were no complications of any kind in the series. The first stage of labor did not seem to be retarded; the second stage was not prolonged. The third stage was of normal duration. Blood loss was minimal. The babies did not require resuscitation. In no case did the blood pressure fall. No toxic reactions occurred and no infections developed at the site of puncture. No supplemental anesthesia was required. The method seems to be a safe, practical procedure with many advantages over continuous caudal analgesia. 4 references.

F. A. M.

SHANE, S. M., AND RUIZ, E. T.: *Use of Adrenalin to Prolong Spinal Analgesia.* Am. J. Surg. 74: 189-191 (Aug.) 1947.