

well have a place in anaesthesia for this special branch of surgery." 3 references.

J. C. M. C.

STEINBERG, MURRAY: *Edema of the Uvula and Edema of the Glottis—A Reaction to Demerol-scopolamine Analgesia*. *Am. J. Obst. & Gynec.* 50: 542-545 (Nov.) 1945.

"From November, 1944, until March 1, 1945, demerol and scopolamine analgesia was used routinely during the labor of all clinic patients and most private patients at the Sinai Hospital of Baltimore, a total of approximately 400 cases. . . . Three cases of edema of the uvula, one with edema of the glottis as well. [occurred]. . . . Kirschbaum has stated that, as a reaction to scopolamine, 'the uvula may swell to five or six times its normal size and may appear markedly reddened. The redness may persist for several days. Argyrol swabs or throat irrigations will correct the condition.' . . . Nowhere have we found any report of edema of the glottis as a reaction to scopolamine analgesia. In view of the uvular edema, however, we believe the same etiologic agent responsible for edema of the glottis. The anesthetist and the medical consultants do not believe it was due to the anesthesia since one case began before the cyclopropane-oxygen-ether anesthesia, one followed nitrous oxide-oxygen-ether, and the other followed pudendal block with procaine. These three patients all exhibited positive skin tests for sensitivity to scopolamine. Many of our patients, however, who exhibited no reaction to scopolamine analgesia, reacted with positive skin tests for scopolamine sensitivity. As a result, we do not believe too much faith can be placed on this skin test as an indication that such a reaction will develop. In view of the gravity of the reaction and its serious implications, we have

discontinued routine demerol-scopolamine analgesia on the Obstetrical Service at the Sinai Hospital of Baltimore." 2 references.

J. C. M. C.

LINS, HELBIO REGO: *Extradural Anesthesia*. *Surgery* 18: 502-507 (Oct.) 1945.

The author discusses the technic of extradural anesthesia and his experience in 600 consecutive cases. The technic as described by Gutierrez in 1932 is outlined by the author. The spinal ganglia, the sympathetic, the spinal nerves, and the dura associated with radicular nerves are anesthetized by extradural anesthesia. There was a rise of blood pressure in 66 per cent of all cases during the anesthesia, a fall of blood pressure in 25 per cent of the cases and no change of blood pressure in 9 per cent of cases. When the blood pressure did fall, 50 mg. of ephedrine was given. Using the average of 45 cc. of 2 per cent solution of novocaine many patients would have anesthesia lasting more than four hours; the average duration was from two to three hours. The author also observed that there was a prolonged period of pain relief following the end of anesthesia. Postanesthetic reactions were rare such as headaches, vomiting and urinary retention. Contraindications for extradural anesthesia were nervous and anxious patients, malnourished patients, cachectic or septic states and those with spinal deformities or ossifications of the interspinal ligaments or a ligamenta flava.

As to the technic the author used, the patient was placed in a sitting position and a special needle was introduced at the selected site of puncture. "After passing through the superficial planes with the special needle the anesthetist withdraws the stylet from the needle and fills the latter with the anesthetic solution in such a way that

he leaves a drop of the solution hanging from the outer receptacle of the needle. He then advances the needle pushing as slowly as possible, and when the epidural space is reached the drop is aspirated inward." . . . "With this sign, and the assurance that the point is in the extradural space, 10 cc. of air is injected to separate the dura from the end of the needle. The anesthesiologist then injects 5 cc. of anesthetic solution and waits five to ten minutes. The latter precaution is essential to ascertain whether the dura has been punctured. If it has the specified amount of anesthetic is sufficient to produce intradural (spinal) anesthesia. If after this time no signs of anesthesia are noted the rest of the solution is injected. The amount of anesthetic solution depends upon its concentration and the duration of the operation."

Various anesthetic solutions have been tried by the author, but he prefers to use Gutierrez mixture (0.5 neotutocain (pontocaine) and 0.50 novocaine (procaine)) which is then dissolved in 50 cc. of physiologic saline solution, and 10 drops of adrenalin added. The anesthetic dose ranged from 20 cc. to 46 cc. The puncture was made between the 7th cervical and the 1st thoracic vertebrae for operations in the neck and thorax. For operations in the abdomen the puncture was made between the 11th thoracic and 3rd lumbar vertebrae. For anesthesia of the perineum and lower extremities the puncture was made between the 3rd and 5th lumbar vertebrae. The time that the patient was kept in sitting position following the injection of anesthesia varied with each site of injection. It took twenty minutes to get complete anesthesia from the time of injection. There was only one complete failure of anesthesia in the series of 600 cases.

The author maintains that failures and accidents which may occur are

due largely to inexperienced and improper technic.

M. L. B.

TRUMAN, S. R.: *Oil Solutions in Local Anesthesia: Experimental Appraisal*. West. J. Surg., Obst. & Gynec. **53**: 364-365 (Oct.) 1945.

"The use of anesthesia in solution in oil has gained considerable popularity for surgery about the rectum and anus. This popularity is due to the prolonged action obtained, anesthesia or analgesia lasting for several days, occasionally as long as a week. After observing the use of the oil anesthetics in a large number of cases the author used a solution made up of procaine base, 1.5 per cent; butesin, six per cent; benzyl alcohol, five per cent; in almond oil for all minor rectal surgery and occasionally postoperatively in hemorrhoidectomies. The results were usually quite satisfactory regarding the relief of pain, but there seemed to be considerable prolongation of the healing time of the wound. . . . A rabbit was anesthetized with an intravenous injection of nembutal and the entire abdomen was shaved. On one side 2.5 cc. of the oil anesthesia was infiltrated subcutaneously over about a three inch area, great care being taken to infiltrate evenly to prevent pooling; then the area was gently massaged to distribute the anesthesia evenly. Following this two squares of skin were excised from this side of the abdomen, one from the area where the oil had been infiltrated and one from an area of untreated skin. On the other side of the abdomen an area three inches square was also infiltrated with 2.5 cc. of the oil anesthesia with similar care. The two linear incisions two and one-half inches long were made on this side, one through the oil infiltrated area and one through an untreated area. Pictures, measurements and notes were made and then the