ABSTRACTS

Editorial Comment: A fixed style of presentation for this department of Anesthesiology has purposely not been defined. It is the wish of the Editorial Board to provide our readers with the type of abstract they desire. Correspondences is invited offering suggestions in regard to the length of abstracts, character of them, and source of them. The Board will appreciate the cooperation of the membership of the Society in submitting abstracts of outstanding articles to be considered for publication.


"My interest in the subject of topical anesthesia began when one death and several reactions due to topical anesthesia occurred at the Oteet Veterans Hospital. . . . After perusing the literature, sending questionnaires to the members of the American Broncho-Esophagological Association, and trying various techniques (drugs singly and in combination), and drug concentrations, we modified our procedure at Oteen. . . . This procedure was developed as a result of our experience in administering 4,493 anesthetics for endoscopic procedures performed at Oteen since 1946. Since it was adopted, we have not had a single reaction to topical anesthesia. . . .

"We found that a 2 per cent cocaine spray was sufficient to lessen the pharyngeal reflex and relax the aditus laryngis. By accurate measurement of the drug solution, before and after spraying, it was found that the average patient required 2 cc. of this solution. . . . A Devilbiss number 127 atomizer is used, as this allows the bottle and bulb to be operated with one hand, leaving the other hand free to hold the tongue initially, and later the laryngeal mirror. Maximum compression of the bulb is avoided until the spray burst can be directed into the aditus under mirror visual control. The patient is advised not to swallow the sprayed material, but to clear his throat and expectorate all excess solution. The soft palate and posterior pharyngeal wall are given several weak bursts in one application. The atomizer tip is then bent to an angle of approximately 90 degrees, and several weak bursts are directed toward the posterior surface of the epiglottis. The patient should now tolerate the presence of the mirror. Under mirror control, repeated weak applications are directed behind the epiglottis until the aryepiglottic muscle fibers relax and a direct view of the glottis is obtained. Several heavy bursts are then directed toward the glottis. . . .

"It is now time to instill cocaine directly into the larynx with a syringe and cannula. We use a 3 cc. syringe, to which is attached a malleable silver eustachian catheter. The cannula is so bent for each case as to allow delivery of the solution into the larynx, avoiding contact between the cannula and the epiglottis. A total of 2 cc. of a 5 per cent solution of cocaine is delivered. The solution is instilled a single drop at a time."

A. A.


"Some psychiatrists know from experience with electro-stimulation of the
brain that certain electro-stimuli appear to aid in the elimination of barbiturates within a very short period of time. This observation suggested the use of selected electro-stimulation in the treatment of patients suffering from overdosage with barbiturates.

Mrs. A. B., aged 49, married, no children. On October 2, the husband found his wife lying on the floor of his home at approximately 11 a.m. She told her husband she had taken 'too many sleeping pills by mistake.' Within a short time the patient was unconscious and was removed to a general hospital. The patient was seen by one of us (J. J. G.) at 2 p.m. She was in deep coma; her pupils were contracted and did not respond to light; corneal reflexes absent; deep reflex absent; positive Babinski on the right side; breathing shallow; pulse imperceptible; blood pressure 88/1. Brain stimulation was commenced at 2.24 p.m. The electrodes were placed immediately above the ears and a modulated electric stimulus was applied. The electric stimulus flowed continuously until approximately 5 p.m., the electrotrodes being in the same position all during this time. It was noticed during this time that the patient's condition was gradually worsening and the treatment was interrupted for a few minutes to enable her to receive the last rites of her church. At this time blood pressure had dropped below 80 and the original picture had re-established itself. Electro-stimulation was commenced again, but this time the electrodes were moved from place to place as it appeared evident that the patient had developed a tolerance to stimulation over the parietal regions and was not responding. Her condition showed dramatic improvement with the changed positions of the electrodes.

Motor response reappeared at 5.15 p.m. and at 9.30 p.m. tendon reflexes returned in rapid succession. At 11:30 p.m. she was fully conscious and able to answer questions without confusion. Examination of the patient the following day revealed that despite such prolonged brain stimulation with electricity no confusion or memory loss were noted. It was later learned that the patient had taken 29 1/2 gr. capsules of pentobarbital sodium and that she had planned suicide for some weeks. It is believed by us that this form of treatment might be of great value in the treatment of coma due to morphine, alcohol or insulin (the so-called irreversible coma)."

A. A.


"The prompt improvement of the signs and symptoms of pulmonary edema of acute cardiac decompensation after spinal anesthesia (see Sarnoff & Parr, Anesthesiology, p. 69, 1944, E. G. B.) caused the authors to use spinal block for major surgery in cardiacs. They discuss the well known objections to spinal anesthesia in this type of patient and feel that in carefully selected patients spinal anesthesia is the anesthesia of choice. The paper covers 20 patients, all decompensated, 15 undergoing ligation of the inferior vena cava below the junction with the renal veins, 5 being submitted to major abdominal surgery. Electrocardiograms were taken before as well as during and 20 minutes after the administration of spinal anesthesia. Sise's technique was used: Injection at L1 of 10 mg. of pontocaine (1 cc.) with equal volumes of 10% glucose and spinal fluid, and a level from D7 to D4 was established. Oxygen was given throughout, and 50 mg. of ephedrine was injected subcu-