

CURRENT COMMENT AND CASE REPORTS

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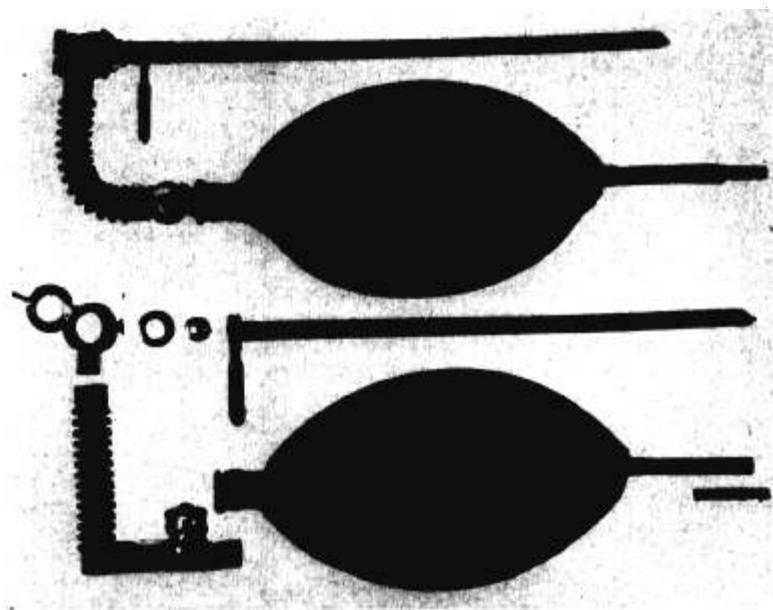
It is difficult to believe that every one of our readers believes every word printed. If you disagree, why not express yourself in a Letter to the Editor? We would like to be the forum for a lively debate—nonacrimonious, of course.

METHOD OF VENTILATION DURING BRONCHOSCOPY

Dr. Steven Kovacs of Cleveland, Ohio, contends that apnea produced by succinylcholine in conjunction with inhalation or intravenous anesthesia provides ideal conditions for the bronchoscopist. He found that by using equipment readily available in hospitals the bronchoscope could be adapted for positive pressure breathing without alteration in the bronchoscope.

The light-carrier opening on a Cameron proctoscopic airchamber was fitted with a corrugated rubber tube approximately $\frac{3}{4}$ inch in diameter and 4-5 inches long. After the incorporation of a pressure-release valve, a 5-liter breathing bag with gas inlet nipple was attached and then connected to an anesthesia machine, oxygen tank with flowmeter, or wall oxygen outlet. The Cameron airchamber will admit a Foregger universal adapter and to this with the help of different sizes of Foregger no. 8 slip joints, the bronchoscopes can be attached. The no. 8 slip joints may have to be filed down to assure an airtight fit.

After the patient is anesthetized and rendered apneic with succinylcholine by continuous drip, the patient is well oxygenated by bag and mask by positive pressure breathing. The bronchoscope now can be passed with ease in the well relaxed patient, and



Positive pressure breathing attachment for bronchoscopy, assembled and disassembled.

the positive pressure breathing can be resumed as soon as the bronchoscope enters the trachea.

The observation glass on the gate of the airchamber is coated with Cler-Site to prevent fogging. For suctioning or passage of a biopsy forceps, the gate (eye piece) can be turned to the side with ease and without handicap to the bronchoscopist.

In the limited number of cases he has used this method, the patient's pulse remained regular, blood pressure stable, and there was no evidence of cyanosis at any time during the procedure. His good results encouraged him to run a larger series, and to compare cardiovascular function, in detail, during bronchoscopy under topical and under general anesthesia, with special attention to the apneic technique.

AN ENDOTRACHEAL CATHETER MODIFIED FOR BRONCHOGRAPHY

Dr. Howard C. Berger of New York City has the following remarks concerning an improvement in the technique of anesthesia for bronchography.

Anesthesia for the bronchogram has usually been a taxing procedure for all concerned. The accidental tearing of a cuff on a Murphy endotracheal tube during such a procedure suggested a simple solution to the problem. The dye for the bronchogram can be inserted through the tube formerly used to blow up the endotracheal cuff. This method works equally well in adults and children. If desired, the distance from the endotracheal tube opening to the dye inserter tube opening may be shortened by trimming off some of the endotracheal tube. Placing a clamp below the small indicator balloon on the inserter tube, filling the balloon with the dye, and then releasing the clamp allows the dye to be ejected with force if this is desired.

A NEW NEEDLE FOR INTRATHECAL PUNCTURE

Dr. Walter Howard Levy of Fort Howard, Maryland, comments on needles for lumbar puncture.

Lumbar puncture, whether for spinal analgesia or for other purposes, is usually a relatively simple, technically uncomplicated procedure. Occasionally technical difficulties may be encountered, even by experts, in which a satisfactory "tap" seems to be elusive. Ample evidence of this fact lies in the number and variety of spinal needles and types of points and bevels that have been devised, all to minimize technical complications.

The long-bevel needle has been largely rejected because the entire bevel may fail to enter the subarachnoid space, in which case much of the agent may be injected into the epidural space with a resultant deficiency of spinal anesthesia. The very short bevel has met objection because it, firstly, tends to "punch" a hole in the spinal meninges which may thereafter leak epidurally for a longer while than the fine puncture. If spinal fluid leakage is a factor in the production of postspinal headache, this objection has validity. Secondly, in inexperienced hands, the tendency to drive the needle a bit too far could result in occlusion of the short bevel by the anterior wall of the spinal canal. In this case there would be difficulty in eliciting any free flow of fluid.

In order to compare the puncture holes produced by various needle points, test punctures were made in a piece of rubber dam which was pressed within layers of gauze. It was found that a 20 gauge needle with a pencil type point left a hole no larger than a 23 or 24 gauge with a standard medium bevel point. The difference was even larger when compared with the short bevel. For this test to have validity, all points compared must be truly sharp.

One excellent needle, heretofore designed, which had the sharp-pencil point, was the Whitacre needle. Its exit opening was on one side, about 2 mm. from its point. It thus had a blind point; this was advantageous in reducing the likelihood of occlusion by end-contact with tissue. There were, however, three disadvantages. The exit hole was smaller than the lumen of the needle; the stilet did not traverse the exit hole and hence could not readily be used to clear it if partly occluded; and it was very difficult to sharpen this point without destroying it.

It would seem that the point of a well-designed spinal needle should have the following characteristics: (1) It should produce a minimal, clean-cut dural puncture. (2) The