

### Complications with Laryngectomy Tube

*To the Editor.*—In using the U-shaped, red rubber laryngectomy tube the following complications have been encountered: (1) The tube was advanced too far resulting in right bronchus intubation.

(2) The tube was inserted in the transected trachea and the cuff was inflated with the tube remaining in the middle line on the chest. The tube, Y-connector and breathing tubes moved to the left resulting in twisting of the tube at the angle with respiratory obstruction.

(3) The tube was kinked at the angle resulting in respiratory obstruction. This occurred in a woman patient with a very thin chest wall, creating a less than 45-degree angle for the tube.

(4) Respiratory obstruction developed following insertion of the tube, which was relieved by deflating the cuff. Retrospectively, it was found that the balloon was not over-distended, but the tube was soft enough to be compressed occluding the lumen of the catheter by the normal inflation of the cuff.

The anesthesiologist who is using this tube must be alert to the above mentioned complications until this tube is manufactured with spiral wire imbedded in the wall of the tube.

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### Toxicity of Intravenous Procaine

*To the Editor.*—Dr. Stewart and associates have written a very interesting study on the

toxicity to the heart of procaine and other local anesthetics administered intravenously to the dog (*ANESTHESIOLOGY* 24: 620, 1963). They correctly point out that "toxicity is ultimately dependent upon the blood level obtained," but neglect to state that blood level is a function of dosage *plus* time for injection of the dose.

Since 1948 dilute solutions of procaine have been used intravenously as a continuous drip for therapeutics and analgesia. In their studies, Dr. Stewart and co-workers injected the drug within a two-minute period; the dose of procaine was about 30 mg./kg./minute. The largest dose of procaine which I have ever given a patient was 13 g. of a 1 per cent solution. This was administered to a patient with toxic hyperthyroidism who weighed 50 kg. It was given over a 90 minute operation. This massive dose is equivalent to a 2.8 mg./kg./minute, in comparison with the 30 mg./kg./minute given to the dogs by the authors. Since 1947 we have given intravenous procaine to at least 15,000 patients in doses less than 2.8 mg./kg./minute without myocardial depression or permanent damage.

My purpose in writing is to emphasize that intravenous procaine is a fatal drug only when given in a large dose rapidly; such accidental massive intravenous injection may occur during administration of local anesthesia. It should not occur during therapeutic use; continuous intravenous procaine is a valuable analgesic agent in general anesthesia.

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**HERNIA BLOCK** When performing regional field block for ilioinguinal or femoral hernia repair, the following areas deserve special consideration: (a) distribution of free nerve endings in the epidermis, fascia and peritoneum; (b) distribution of the intercostal nerve supply to the lower abdomen, groin and upper thigh; (c) sympathetic nerve supply to the blood vessels and in the spermatic cord; (d) innervation of the periosteum of the pubic tubercle and region of Cooper's ligament; (e) distribution and course of the genitofemoral nerve; and (f) innervation of the peritoneum. (*Ponka, J. L.: Seven Steps to Local Anesthesia for Inguinofemoral Hernia Repair, Surg. Gynec. Obstet.* 117: 115 (July) 1963.)