

Cole Endotracheal Tube: Frank Cole. He devised this tapered endotracheal tube while at the University of Nebraska in 1945.

Crawford Epidural Needle: Oral Crawford of Springfield, Missouri. This epidural needle has a short and blunt bevel.

Foregger Machine: Richard von Foregger, 1872–1960. He constructed an anesthesia machine in 1923 and founded the Foregger Company. His son, Richard Foregger, M.D., practices in Milwaukee, Wisconsin.

Guedel Airway: Arthur E. Guedel, 1883–1956. Guedel was a prominent teacher of anesthesiology in the midwest and at the University of Southern California. He devised his airway in 1932 and also described the signs of ether anesthesia in 1920.

Greene Spinal Needle: H. M. Greene of the University of Oregon. Invented in 1923, this needle has a smooth, round point, which is designed to separate, rather than sever dural fibers, resulting in a smaller dural opening and a much slower loss of cerebrospinal fluid.

Huber Point: Ralph L. Huber of Seattle, Washington. Although originally described for hypodermic needles, this tip was adapted by Tuohy for his needle. Thus, the "Tuohy epidural needle, with Huber point" has become popular. Huber patented his hypodermic needle in 1946; his estate was issued other patents in 1955 and 1956.

Hustead Needle: Robert Hustead. Long an obstetrical anesthesiologist in Kansas City, Kansas, he now practices in Wichita, Kansas. He modified the Tuohy needle by making the head of the bevel opening smoother, thus reducing the incidence of the shearing of epidural catheters.

Heidbrink Machine: J. A. Heidbrink. He developed anesthesia machines in the 1920s and founded the Heidbrink Company, which was absorbed by Ohio-Chemical Company.

Miller Laryngoscope Blade: Robert A. Miller. This blade was described by Miller in 1941. He resided in San Antonio, Texas.

Magill Endotracheal Tube: Ivan Whiteside Magill, 1888–, an English anaesthetist. He worked with Rowbothan to develop endotracheal anesthesia in the 1920s.

Macintosh Laryngoscope Blade: Sir Robert Reynolds Macintosh, 1897–. Worked at Nuffield Infirmary, Oxford. He developed his curved blade in 1943.

Mapleson Breathing System: William W. Mapleson of Cardiff, Wales. He modified the Magill Breathing System and described it in 1954.

Murphy Endotracheal Tube: F. J. Murphy, 1900–. He described a red rubber endotracheal tube in 1941. Our modern plastic endotracheal tubes are of the Magill style but still have a Murphy "eye."

Phillips Laryngoscope Blade: Otto C. Phillips, 1917–1981. He

described the blade in 1973 in Pittsburgh, Pennsylvania. This is a straight blade with a curved tip.

Quincke Spinal Needle: Heinrichus Iramaeus Quincke, 1884–1922. Quincke demonstrated the usefulness of spinal puncture as a diagnostic procedure in 1881 and was a colleague of Bier. Our spinal needles have "Quincke Points."

Robertshaw Endotracheal Tube: Frank L. Robertshaw, English surgeon. He practiced at Manchester, England, and described this double-lumen endotracheal tube in 1962.

Rovenstine Adapter: Emery A. Rovenstine, 1895–1960. He was a well-known teacher and Chairman at New York University and a former President of the ASA, 1943–1944.

Salem Sump Tube: It was named after a small New York town near which it was developed in the early 1960s. It is a modification of the Levin Tube, which was described in 1921.

Sellick Maneuver: B. A. Sellick, Consultant Anesthetist, Middlesex Hospital, London. This maneuver, described in 1961, involved pressure on the cricoid cartilage to occlude the esophagus.

Siker Laryngoscope Blade: Ephraim S. Siker. He devised a mirror laryngoscope in 1956, in Pittsburgh, Pennsylvania. He is a former President of the ASA (1973).

Tuohy Needle: Edward B. Tuohy, 1908–1959. He devised the Tuohy epidural needle in 1944 (originally made for continuous spinal anesthesia).

Weiss Epidural Needle: Jess Weiss of Boston, Massachusetts. This is a Tuohy Needle with addition of wings to the hub. He is a former President of the ASA (1979).

Whitacre Spinal Needle: Roland John Whitacre, 1909–1956. A former President of the ASA (1950), he resided in Cleveland, Ohio. This needle has a sharp pencil-like point, designed to reduce the incidence of post-spinal headache.

I would like to thank Mr. Patrick Sim of the Wood Library–Museum of the American Society of Anesthesiologists, Park Ridge, Illinois, and Mr. Jack Palm, Director, Medical Technique Products, Becton-Dickinson, Rutherford, New Jersey, for their help with this project.

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Use of Petroleum Jelly

To the Editor:—The letter by Quintin *et al.*¹ in the correspondence section of the March 1985 issue of ANESTHESIOLOGY entitled "Decreasing the Incidence of

Upper Airway Bleeding When Using a Large-size Nasotracheal Tube" is laudible in many respects. The authors correctly define a problem and suggest a cure.

However their proposal for the use of petroleum jelly is not to be condoned. Thus, "The cuff generously is lubricated with liquid sterile petroleum jelly—5 ml liquid sterile petroleum jelly is poured down the selected nostril."

More than 30 years ago it was correctly noted that lubricating the endotracheal tube with an oil-soluble substance might lead to a lipoid pneumonia quite difficult to treat.² We have since used water-soluble lubricants. Quintin *et al.* have in fact done us a disservice by suggesting a return to the era when we were causing harm by using petroleum jelly.

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REFERENCES

1. Quintin L, Ghignone M, Odelin P: Decreasing the incidence of upper airway bleeding when using a large-size nasotracheal tube. *ANESTHESIOLOGY* 62:374, 1985
2. Genereux GP: Lipids in the lungs. *J Can Assoc Radiol* 21:2-15, 1970

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Butorphanol and Biliary Spasm

To the Editor:—Product information on butorphanol states, "Clinical studies have not been performed to establish the safety of butorphanol administration to patients undergoing biliary tract surgery."

I write to report a case of right hypochondriacal pain following the administration of butorphanol that was relieved by naloxone.

A 32-year-old woman was scheduled for breast biopsy under general anesthesia as an outpatient. Her history revealed multiple previous operations including discectomy, hysterectomy, cholecystectomy, colon surgery, hiatal hernia repair, and multiple urethral dilations. She was taking coumadin for deep venous thrombosis of the calf and amytriptyline for mood elevation. She gave a history of respiratory depression with morphine and rash with codeine, ampicillin, penicillin, and compazine. She was mildly obese, but physical examination was essentially unremarkable.

After discussion with the operating surgeon, it was agreed to proceed with the intended surgery. Anesthesia was induced with methohexital after curare and preoxygenation and followed with succinylcholine and endo-

tracheal intubation. Maintenance with atracurium, oxygen, nitrous oxide, and isoflurane was uneventful. Ten minutes after arrival in the recovery room, she complained of pain at the operative site and was given butorphanol, iv, in 0.5 mg increments over the next 15 min to a total of 2.0 mg with good effect. Fifteen minutes later, the patient was crying out, writhing, and complaining of right hypochondriacal pain "just like when I was given morphine." Naloxone, 0.12 mg, was given with immediate relief of these symptoms. Ten minutes later a further 0.12 mg of naloxone was required for a recrudescence of the same symptoms with the same immediate relief.

Further recovery was uneventful, and she was discharged 2.5 h after the end of the surgical procedure.

It would seem probable that, in this patient, butorphanol caused biliary spasm.

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Air Embolism via a Pulmonary Artery Catheter Introducer

To the Editor:—We would like to draw attention to a problem recently encountered with the use of an Arrow® catheter adapter with hemostasis valve and side port, recorder number SV-07000.

A 50-year-old man presented with an unstable cervical fracture after being run over by his own car while working on the engine. He was known to have cardiomyopathy with a significantly reduced ejection fraction,