

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.<sup>2</sup> 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.

MARTIN I. GOLD, M.D.  
*Professor of Anesthesiology*  
*University of Miami School of Medicine*  
*P. O. Box 016370*  
*Miami, Florida 33101*

## 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

(Accepted for publication April 19, 1985.)

Anesthesiology  
63:340, 1985

### 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.

DR. P. F. DOLAN  
*Plaza Surgery*  
*979 East Third Street*  
*Chattanooga, Tennessee 37403*

(Accepted for publication April 19, 1985.)

Anesthesiology  
63:340-341, 1985

### 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,