

Anesthesiology
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More about *d*-Tubocurarine and Succinylcholine in Obstetrics

To the Editor:—We feel Marx and Bassell¹ have failed to present a reasonable and compelling case for the use of curarisation prior to suxamethonium. In the United Kingdom the technique rarely is used in obstetric anesthesia because of the following reasons:

1. Some patients are exquisitely sensitive to small doses of *d*-tubocurarine: double vision, inability to swallow and a feeling of being unable to breathe can occur—not a good thing in an anxious patient.

2. A larger dose of suxamethonium must be used to produce ideal conditions for intubation and may increase the risk of bradycardia.

3. If no fasciculations occur, where is the end point when one can begin intubation? Has the suxamethonium reached the muscles and been effective?

Smith *et al.*² has reported an increase in intragastric pressure but has noted a concomitant increase in lower oesophageal sphincter tone causing a net slight increase in barrier pressure after suxamethonium; this response, however, may be attenuated in pregnancy.

Oxygen consumption rises in anesthetized dogs during suxamethonium infusion³ *not* after a single bolus in healthy patients.⁴

Like Crawford⁵ we have not found postpartum suxamethonium pains to occur often or create any problems with the mother.

Our advice would be to keep the technique for emergency obstetric anesthesia as simple as possible.

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Modified Oral Airway for Fiberoptic Bronchoscopes

To the Editor:—The techniques employed to perform routine bronchoscopy have changed as new equipment has been introduced and perfected. The development and use of fiberoptic instruments has limited the use of the rigid bronchoscope in recent years. This has encouraged modifications in anesthesia technique. Previously, an awake although sedated patient breathed spontaneously. The use of a fiberoptic bronchoscope allows the anesthesiologist to employ general endotracheal anesthesia with the use of muscle relaxants when indicated. This permits a more meticulous examination of the tracheo-bronchial tree by the operating surgeon as the

airway is secured. The length of the procedure generally is not a problem because the patient is anesthetized and properly ventilated.

The optimum position of the endotracheal tube for ease of bronchoscopy is in the midline. In the course of thousands of fiberoptic bronchoscopies, we found it quite difficult to maintain this midline position during the procedure, even when heavy taping was employed. Additionally, heavy taping was a problem if the endotracheal tube needed rapid adjustment during the procedure. Since we usually employ an oral airway during bronchoscopy, it was decided to modify the airway to allow

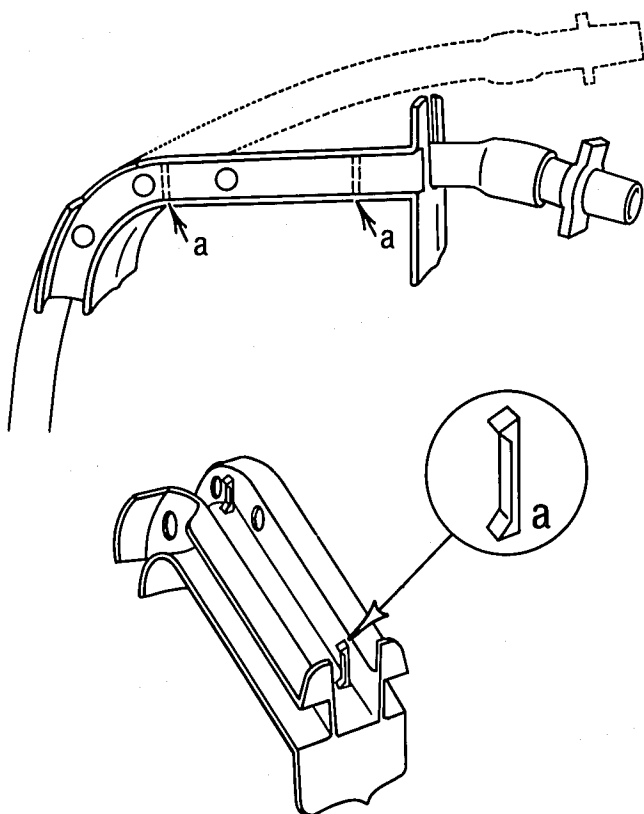


FIG. 1. Illustration showing airway modifications for securing midline placement of endotracheal tube.

optimal positioning of the endotracheal tube without the use of tape, thus allowing for rapid adjustment and removal when necessary.

The Luomanen airway shown in figure 1 is the result of our efforts.* It is a rigid plastic airway patterned on the standard oral airway with the following modifications. It is wider than the standard oral airway with a trough through the center that is designed to hold the endotracheal tube in place. The plastic projections in the trough (labeled (a) in the illustration) effect a friction grip and hold the endotracheal tube firmly in place. There are suctioning channels on either side of the center trough beneath the occlusal surface of the airway. The straight proximal end of the airway is finished with a large lip that sits on the buccal surface of the anterior teeth, securing the midline position of the airway and the endotracheal tube. Taping is not needed.

In use we have found the Luomanen airway to be an excellent device to effect and maintain optimum midline position of the endotracheal tube and thus the fiberoptic bronchoscope during bronchoscopy.

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Potential Interactions between Cimetidine and Amide Local Anesthetics in Obstetrics

To the Editor:—In reference to the August 1983 editorial¹ and lead article,² we wonder if intramuscular cimetidine can be recommended yet for emergency cesarean section with the use of epidural anesthesia with lidocaine or bupivacaine, or even where amide local anesthetics have been used in the preceding hours for continuous analgesia. This probably was not the authors' intent, though in our institution the definition of "emergency" can and frequently does allow sufficient time to extend a preexistent epidural block to provide anesthesia for cesarean section. Moreover, occasionally general anesthesia must be used because of inadequate regional anesthesia, despite the attempt to extend the dermatome level for surgery. In the case of lidocaine, cimetidine has

been shown to interfere both with hepatic oxidative metabolism and initial distribution (30% increase in peak plasma level) after 100 mg iv over 10 min.³

The chemically dissimilar H₂ blocker ranitidine (furan ring structure instead of an imidazole nucleus)⁴ might be safe in such circumstances, though to our knowledge its possible interactions with amide local anesthetics, *per se*, have not yet been studied, despite a demonstrated lack of effect on hepatic microsomal enzymes⁵ and probably on liver blood flow.⁶

When the current H₂ blockers are used, another reason for i.m. administration, not oral, is the reduced bioavailability of both cimetidine and ranitidine with simultaneous antacid ingestion, at least in high doses.^{7,8}