

Anesthesiology
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Bupivacaine Cardiotoxicity—Concentration or Dose?

To the Editor:—In August 1983, a “dear-doctor” letter was sent by the three manufacturers of bupivacaine to all anesthesiologists in the United States advising that “the 0.75% concentration of bupivacaine is no longer recommended for obstetrical use.” This has led many of our colleagues to assume that lower concentrations of the drug are less hazardous. However, I have information from the Food and Drug Administration (FDA) and other sources concerning severe adverse reactions in previously healthy parturients following the use of both the 0.5% and the 0.25% concentrations of bupivacaine. Four cardiac deaths occurred after the administration of 75 mg (3 gravidae) to over 110 mg (1 gravida) of 0.5% bupivacaine for lumbar epidural analgesia. Two cardiac deaths resulted from the single-dose injection of 60 and 75 mg

of 0.25% bupivacaine into the caudal canal. In three of these six cases, the use of a test dose was not recorded.

It is thus evident that the patient’s peak plasma level of bupivacaine depends not on the concentration used, but on the actual dose injected. Strict adherence to the recommended safeguards (*i.e.*, appropriate test dosing, fractionation of the therapeutic dose, *etc.*) is imperative for all concentrations of bupivacaine if further tragedies are to be avoided.

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Another Use for the Suction Port on the Pediatric Flexible Bronchoscope

To the Editor:—In the management of children with difficult airways, we commonly use an Olympus BF® (type 3C4) bronchoscope to perform endotracheal intubation. This instrument has an external diameter of approximately 3.5 mm and a correspondingly small suction port, which readily becomes ineffectual when viscous secretions are aspirated. The usefulness of this instrument also diminishes markedly when tissue obscures the visual field. We have found that a flow of oxygen through the suction port alleviates both of these problems—*i.e.*, it keeps secretions away from the lens and expands tissues that may collapse around the bronchoscope. The flow of oxygen from the port may also aid in oxygenation of the patient.

The apparatus is assembled by attaching an oxygen tubing from an oxygen E cylinder to the suction port on the bronchoscope. A 5–6 l/min flow maintains a clear lens. The flow of oxygen through the bronchoscope can be increased by occluding the suction port external valve.

This increased flow can separate collapsed structures that obscure the view from the lens. An independent oxygen source maintains the anesthesia circuit intact for immediate use. This modification can assist the fiberoptic operator to visualize airway anatomy and enhance fiberoptic intubation skills.

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Topicalization, Oxygenation, and Suction via a Single-channel Fiberoptic Bronchoscope

To the Editor:—Fiberoptic bronchoscopic intubation of the trachea is an established technique in the anesthetic management of the patient with a difficult airway.

The bronchoscope in use at this medical center (Pentax® FB 15 H) incorporates within its length a single working channel. At the control handle, this channel can