A Simple Device for Delivering Bronchodilators into the Anesthesia Circuit

To the Editor.—The use of nebulized beta-adrenergic agents given through the anesthetic breathing circuit has been reported to be effective in the treatment of intraoperative bronchospasm.\(^1\) Employment of these agents may be hampered by the need for special adaptors required to place the agents in the anesthetic delivery system. We have devised a simple system for the delivery of metaproterenol (Alupent\(^\text{®}\)) into the anesthetic breathing system.

An 18-ga disposable needle (Abbott Hospital Products, North Chicago, Illinois) with a plastic hub is inserted through a standard disposable elbow connector. (fig. 1) The needle hub is trimmed about 8 mm to permit proper function of the inhaler. A 15-ml Alupent Medihaler\(^\text{®}\) (Riker Laboratories Inc., Northridge, California) is inserted into the shortened hub; when the Medihaler\(^\text{®}\) is depressed, a metered dose of metaproterenol (0.65 mg) is discharged from the stem and through the
18-ga needle. When bronchodilator is required, the elbow connector is placed in its standard position in the breathing circuit, and the Medi-Haler® is depressed once or twice; the patient then is given a large positive-pressure breath. The modified elbow connector then is removed from the circuit until the next dose of bronchodilator is desired.

No special adaptor is required, and the system can be set up quickly, thus making use of inhaled beta-adrenergic agents an attractive alternative for the treatment of intraoperative bronchospasm.

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(Accepted for publication December 18, 1984.)

Another Method to Provide Left Uterine Displacement

To The Editor:—Several inflatable devices to provide left uterine displacement (LUD) have been described. One company makes a device that connects to the common gas outlet of the anesthesia machine® and sells for $275.00. Redick1 has described using an inflatable bag to which rubber tubing and a sphygmomanometer bulb are attached. Placing the bladder from a large blood pressure cuff under the hip also has provided an acceptable degree of LUD.2

We describe a device that can be assembled entirely of discarded materials (fig. 1). An empty 3-l polyvinylchloride bag (previously the container for urologic or arthroscopic irrigation fluids) is connected to a regular iv fluid administration set. A three-way stopcock is attached to the tubing. The barrel of a 3-ml syringe, with plunger removed, connects to the second female port of the stopcock. A 15-mm adapter from a 7-mm endotracheal tube is inserted into the barrel of the syringe. A catheter adapter† may be connected to the male port of the stopcock and a short piece of rubber tubing with a sphygmomanometer bulb attached so the device can be inflated manually. When assembling this apparatus, the spike point of the iv set is cut off to prevent puncturing the bag, and all the connections are

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FIG. 1.