of all surfaces of the nasal mucosa. The distance markers allow insertion to a known depth, usually 6–7 cm in the adult. It is atraumatic and well tolerated in the fully alert patient. The technique makes efficient use of the anesthetic solution; 1 ml 4% cocaine usually provides satisfactory vasoconstriction and topical anesthesia in each nasal cavity.

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Bronchopulmonary Lung Lavage

To the Editor:—We would like to take exception to a few points made in a recent article concerning bronchopulmonary lung lavage.[1]

Our institution has done 56 lung lavages in patients with severe asthma and pulmonary alveolar proteinosis over the past 8 years. We use red rubber Robertshaw double-lumen tubes instead of National Catheter Corporation left lung double-lumen tubes. Occasionally we use a small Carlens or White double-lumen tube in patients under 50 kg. The distance from the proximal edge of the endobronchial cuff to the proximal edge of the tracheal lumen is only 3.4 cm in the 39 and 41 Fr. National Catheter tubes. The distance in the medium and large red rubber Robertshaw double-lumen tube is 5.3 and 5.8 cm respectively (fig. 1). The much smaller distance in the National Catheter double-lumen tube leaves little margin for error in placement of the tube. The proximal edge of the bronchial cuff cannot be placed more than 3 cm into the left main bronchus. Therefore, any event that could cause even the slightest motion of the tube may cause it to become displaced, leading to a potential catastrophe.

Instead of using a bronchoscope for proper placement of the double-lumen tube, we use a chest x-ray and fluoroscopy. This technique has the advantage in that not only can we determine correct double-lumen tube placement, but we can watch for movement of all lobes of the right or left lung during controlled ventilation. Occasionally it is very difficult to auscultate the chest in these patients to insure correct double-lumen tube placement. The use of fluoroscopy allows us to check position and ventilation at any time during the procedure. Fluoroscopy

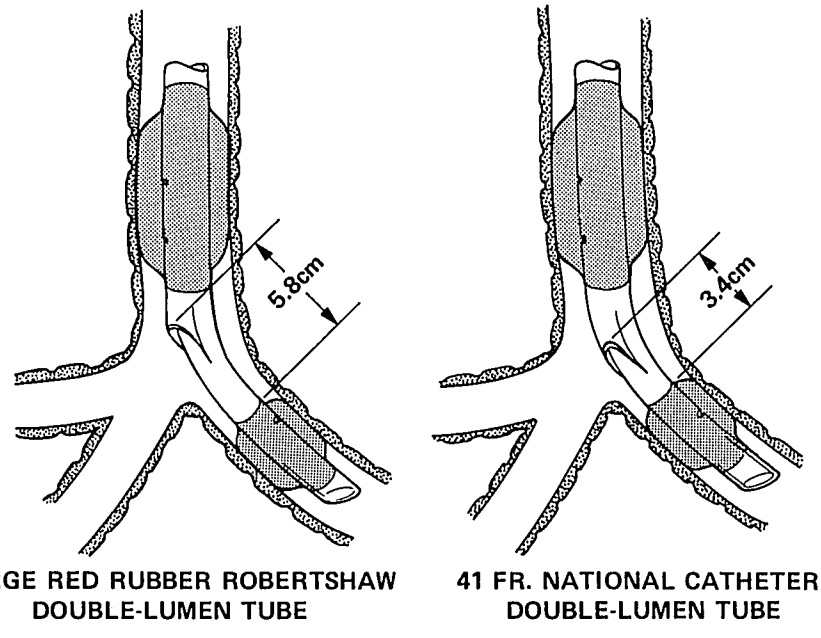

FIG. 1. Comparison of double-lumen tubes.

is especially advantageous to insure ventilation of the right upper lobe when a White or right Robertshaw double-lumen tube is used.

We agree that the largest double-lumen tube possible should be used. The authors did not elaborate about what they did if the largest possible double-lumen tube required the endobronchial cuff to be inflated beyond the point of luminal encroachment. Possibly this situation never arose in their series. In the case where the endobronchial cuff requires inflation slightly past the point of luminal invagination, bronchial cuff herniation and carinal deviation is a real problem. The bronchial cuff of the Robertshaw tube sits farther down the left main bronchus, making herniation very unlikely.

The National Catheter double-lumen tube has been shown to be reliable during routine thoracic anesthesia.[2] However, until this double-lumen tube is modified, we have marked reservation concerning its use in bronchopulmonary lung lavage.

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CO_2 Absorber Malassembly

To the Editor:—A malassembly of two Ohio CO_2 absorbers was reported recently to Ohio Medical Products. During a case in which a CO_2 analyzer was being used, inspired levels of CO_2 of 15–18 mmHg and end-tidal levels of 50–60 mmHg were detected. All machines in the OR suite then were checked and one other produced inspired levels of 13 mmHg. A malassembly of a CO_2 bypass plug assembly was discovered in the two defective absorbers.

The CO_2 bypass valve is intended to permit rebreathing of CO_2. In operation, the CO_2 bypass valve will open or close a port internal to the absorber head. When in the bypass mode, some of the expiratory gases will bypass the absorbant. The Ohio® Model 20/21 Absorber also may be purchased without the CO_2 bypass valve. A plug assembly is installed in its place. In the case of the defective absorbers, the plugs were misassembled. The correct plug assembly is shown in figure 1.

In summary, we wish to call your attention to this finding and encourage you to examine your absorber for a possible malassembly. We also want to stress the importance of having properly trained personnel servicing or modifying your equipment with original manufacturer's replacement components.

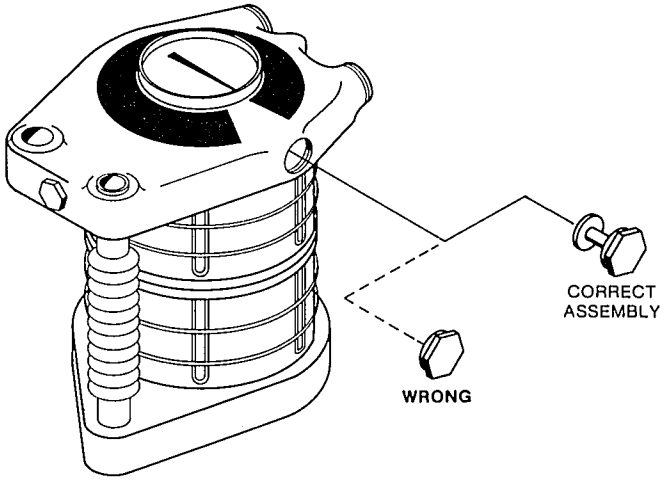

FIG. 1. Ohio® Absorber—Model 20/21 bypass valve plug assembly.

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