

Anesthesiology
64:835, 1986

Improved Technique for Fiberoptic Intubation

To the Editor:—Two recent letters^{1,2} describe pitfalls related to fiberoptic intubation, which may be avoided if the operator continues to view the airway or the interior of the endotracheal tube throughout the intubation. The operator should always know where the bronchoscope tip is in the airway. As the endotracheal tube is advanced over the bronchoscope, the trachea should remain in view, and as the intubation is completed, the end of the endotracheal tube will come into view as it passes the tip of the bronchoscope. At this point, the endotracheal tube and bronchoscope can be moved as a unit to position properly the endotracheal tube above the carina. If the endotracheal tube does not come into view or there is difficulty advancing the endotracheal tube, then, as suggested by Moorthy and Dierdorf, the endotracheal tube may be passing into the esophagus.

Another potential problem may occur if the tip of the bronchoscope is not in the neutral position as the endotracheal tube is advanced. The tube may then be difficult to advance once it reaches the bending portion of the flexible bronchoscope. Also, the control cables within the bronchoscope may be stretched if the endotracheal tube

is advanced with sufficient force over a flexed tip. It is helpful to advance the endotracheal tube with the use of a twisting motion, rolling the tube between the thumb and first two fingers of one hand. This reduces the force needed to advance the tube.

Finally, a stiffer fiberoptic bronchoscope (Olympus® LF-1) is now on the market. This is a superior instrument for intubation because its stiffness helps avoid such problems as those described by Moorthy and Dierdorf.

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(Accepted for publication January 10, 1986.)

Anesthesiology
64:835-836, 1986

Using a Conventional Ventilator in the Presence of a Bronchopleural Fistula

To the Editor:—I was interested to read the report of Albelda *et al.*,¹ which confirms the relationship between airway pressure and bronchopleural fistula (BPF) flow during high-frequency jet ventilation. They recommend

documentation of airway pressures and fistula flow when this modality is used to treat patients with BPF.

We recently treated a 20-yr-old man who had been injured in a motor vehicle accident. His major injury was

TABLE 1. Ventilator Settings

Tidal Volume ml	Respiratory rate · min ⁻¹	Minute Ventilation l	Peak Airway Pressure cmH ₂ O	PEEP cmH ₂ O	Mean airway Pressure cmH ₂ O	Fistula per Breath ml	Flow l/min
1. 800	16	12.8	40	10	16	170	2.72
2. 800	16	12.8	39	↓ 5	15	150	2.4
3. 500	↓ 30	15	33	5	12	70	2.1
4. 250	↓ 60	15	24	5	11	20	1.2
5. 250	60	15	22	5	10	10	0.6

1-4: Effect on fistula flow of sequential reduction of mean airway pressure by reduction of PEEP and tidal volume and compensatory

increase of rate (↓ change) 5:24 h later, with increased pulmonary compliance.