



FIG. 1. Size 8.0-mm ID Mallinckrodt Hi-Lo (*top*) and Sheridan (*bottom*) polyvinylchloride endotracheal tubes. The Sheridan tube's longer cuff can be seen.

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In Reply:—Dr. Sosis brings up an interesting point in that the original study to which he refers was done with Mallinckrodt intermediate Hi-Lo cuffed endotracheal tubes. The Sheridan cuff is indeed more proximal to the 15-mm adapter than is the Mallinckrodt, so the high position of the cuff he describes is certainly possible in a tall patient with a long neck. The photograph (fig. 1 accompanying his letter) exaggerates the more proximal position of the Sheridan cuff, whereas in fact it is only 8 mm closer to the 15-mm adapter than is the cuff on the Mallinckrodt. It is difficult to believe that 8 mm would make a significant difference in most patients.

I disagree with Dr. Sosis's conclusion that the technique of routinely securing endotracheal tubes at the 21- or 23-cm marks at the incisor teeth should be abandoned on the basis of his finding. If a tall patient has a persistent leak after placement of an endotracheal tube when the tube is taped at predetermined centimeter markings, then the tube should be placed more distal in the trachea. The method of using arbitrary marks to secure the endotracheal tube has made endobronchial intubation a rare event in our 50-bed intensive care unit (ICU) over the past 5 yr. An endotracheal tube cuff leak usually is obvious

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Another Reason for Difficult Pulmonary Artery Catheterization

To the Editor:—We recently encountered a case in which pulmonary artery catheterization was difficult. The patient was a 70-year-old man scheduled for repeat coronary artery bypass grafting. As part of our anesthetic management, pulmonary artery catheterization under local anesthesia and sedation was planned. The right subclavian vein was cannulated, and an Abbott Opticath, fiberoptic pulmonary catheter (Model P7110-EPH-8, list number 50328) was inserted. When the catheter tip was advanced towards the right ventricle, atrial premature contractions followed by ventricular premature contractions were observed. However, a right ventricular pressure trace was never seen.

tubes obtained from different manufacturers, we caution against their technique of endotracheal tube placement. Instead, we recommend securing the endotracheal tube after its cuff has been noted to be below the vocal cords on laryngoscopy.

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and is easily remedied, whereas endobronchial intubation may be more difficult to diagnose in the absence of a chest x-ray and can certainly lead to more serious consequences. I have no quarrel with the technique of securing the endotracheal tube at the point at which the cuff is just below the vocal cords on laryngoscopy, as recommended by Dr. Sosis. There are, however, drawbacks to this technique, in that the cords are not necessarily visualized with every laryngoscopy, and in that in the ICU laryngoscopy is not a convenient method for frequent documentation of tube position. No method of doing anything in medicine is fool-proof.

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The process was repeated several times with the patient first supine and then in the head-up, right lateral tilt position,¹ with the same results. Connections to the transducers were confirmed as correct. The catheter then was removed for inspection. It was noted that injection of fluid into the blue-colored port labeled "CVP PROXIMAL" came out the distal lumen orifice, while injection of fluid into the port labeled "PA DISTAL" emerged from the proximal CVP lumen. A second pulmonary artery catheter was obtained, and the patient's pulmonary artery was successfully catheterized.

Factors predisposing to difficult pulmonary artery catheter placement