More on Nasotracheal Intubation in Children

To the Editor — Cox recommended suctioning the nasopharynx before nasotracheal intubation in children to prevent nasal secretions from entering the tracheal tube and possibly the lungs. The following procedure may be used also. The tip of a suction catheter is inserted beyond the distal end of the endotracheal tube. This permits transit through the nasal passage without the tube filling with secretions. If secretions are visualized in the nasopharynx, suction is applied. After tracheal intubation, the catheter is removed while suction is applied to avoid possible contamination with secretions. This procedure is easy and fast and prevents tracheal tube occlusion and lung contamination with nasopharyngeal secretions.

Saussine Max, M.D.
Département d’anesthésie-réanimation B
Hôpital Arnaud de Villeneuve
37, avenue du Doyen Gaston Giraud
34 295 Montpellier, France

Reference
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Pulmonary Artery Catheter Passing between the Chordae Tendineae of the Tricuspid Valve

To the Editor — A 39-yr-old (height 171 cm, weight 50 kg) man was scheduled for mitral valve replacement and tricuspid annuloplasty. Preoperative cardiac angiography showed severe mitral regurgitation and severe tricuspid regurgitation. Cardiac enlargement with a cardiothoracic ratio of 82% was seen on chest x-ray, and atrial fibrillation was present.

After induction of anesthesia with 5 mg diazepam and 1.5 mg fentanyl, insertion of a pulmonary artery catheter (PAC, Opticath model P7 110-EH, Oximetrix, Mountain View, CA) via the right internal jugular vein was attempted. The catheter failed to advance from the right atrium into the right ventricle, presumably because of regurgitant flow at the tricuspid valve. The PAC balloon was deflated, after which the catheter tip passed easily into the right ventricle. The PAC balloon was inflated, and the catheter was easily advanced into the pulmonary artery. Insertion length was 48 cm. When the surgery began and the right atrium was opened, the PAC was found to be passing between the chordae tendineae of the posterior leaflet of the tricuspid valve (fig. 1). If we had not recognized this problem early and had attempted to withdraw the catheter while the balloon was inflated, the chordae tendineae might have been ruptured.1,2 Although we have not experienced such a complication, the passage of a PAC through the chordae tendineae of the tricuspid valve may not be rare if the catheter is inserted with the balloon deflated in patients with tricuspid regurgitation.

Motoshi Kainuma, M.D.
Associate Professor of Anesthesiology
Morimasa Yamada, D.D.S.
Assistant Professor of Anesthesiology
Toshiyuki Miyake, M.D.
Professor of Anesthesiology
Department of Anesthesiology
Fujita Health University
1-98 Dengakugakubo, Kutsukake-cho
Toyoake, Aichi, Japan

Fig. 1. The pulmonary artery catheter passing between the chordae tendineae of the tricuspid valve.
Use of a Left-sided Double-lumen Tube to Occlude the Right Upper Lobe Orifice

To the Editor.—Morell et al.\(^1\) describe their innovative treatment of a patient with massive right upper lobe hemorrhage using an intentionally misplaced right-sided double-lumen endobronchial tube. In their patient, the tube was positioned so that the right endobronchial cuff occluded the right upper lobe bronchus, effectively controlling bleeding from that orifice. Positioning of the tube was facilitated by the use of a fiberoptic bronchoscope.

In their discussion of alternative airway management techniques, the authors correctly state that a left-sided double-lumen tube (used in the conventional manner) would have protected the left lung from contamination but would not have protected the right middle and lower lobes. I would like to add to their comments that a left-sided endobronchial tube can be used to successfully tamponade a bleeding right upper lobe when it is intentionally “misplaced” into the right main stem bronchus. This technique was first reported in 1972 by Carron and Hill\(^2\); their paper described the use of a Carlen’s tube with the endobronchial lumen passed into the right main stem bronchus to facilitate right upper lobe intubation in a patient with massive hemorrhage from that lobe. I have employed a similar technique to control hemorrhage from the right upper lobe in a patient in the intensive care unit. For that patient, I used a modern clear-plastic Roberts-shaw-configured left-sided tube. To accomplish passage of a left-sided double-lumen tube into the right main stem bronchus, one merely advances the tube rotated 180° from the configuration in which it normally is advanced down the trachea (with the distal left lumen angled to the right). This maneuver results in the main body of the tube bending in the oropharynx away from its preformed angle, which does not seem to cause a problem. One would expect that occlusion of the right upper lobe bronchial orifice would be accomplished more easily using a left-sided tube, because there is no venting slot on the left bronchial lumen. Subsequent fiberoptic examination of the right upper lobe orifice for the presence of continued bleeding might necessitate a bit more tube manipulation than when using a right-sided tube; but, it is hoped, the clinical situation would be less urgent at that time.

I draw this technique to the attention of readers of the Journal for those situations in which the clinician cannot adequately visualize structures with the bronchoscope because of massive hemorrhage. A right-sided tube or fiberoptic bronchoscope is not readily available, or a practitioner more comfortable with the use of a left-sided tube.

David D. Alfery, M.D.
Member, Anesthesia Medical Group, P.C.
Centennial Medical Center
Nashville, Tennessee 37215

References


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