An Unusual Cause of Endotracheal Tube Obstruction

To the Editor—A 1,300-g neonate requiring ventilatory support was intubated with a 2.5-mm endotracheal tube containing a new disposable, plastic-sheathed stylet. Upon removing the stylet with some difficulty and attaching the endotracheal tube to the breathing circuit, ventilation was attempted but impossible. Immediate laryngoscopy confirmed correct position of the tube through the larynx. Rapid transillumination of both lung fields revealed no evidence of tension pneumothorax. Replacement with a new endotracheal tube provided effective ventilation.

Examination of the first tube revealed the lumen to be clogged by the distal sheared-off portion of the plastic sheath surrounding the metal stylette (fig. 1). The stylette was a new, unused 6-French Satin-Slip™ intubating stylette with lubrication recommended for tracheal tube sizes 2.5–4.5 mm. The sheathed stylette tube fitting was snug, and we suggest caution be used with sheathed stylets used for small lumen endotracheal tubes, with unsheathed stylets or no stylets being the other option.

WALTER P. ZMYSLOWSKI, M.D.
Assistant Clinical Professor of Anesthesia

DAVID KAM, D.M.D., M.D.
Chief Resident in Otolaryngology

GEORGE T. SIMPSON, M.D.
Professor Otolaryngology
Director of Otolaryngology

Boston University School of Medicine
Boston City Hospital
818 Harrison Avenue
Boston, Massachusetts 02118

(Accepted for publication February 7, 1989.)

FIG. 1. Endotracheal tube and stylet showing the sheared-off portion of the plastic sheath surrounding the metal stylet.

A Problem with Metal Endotracheal Tubes and Plastic-coated Stylets

To the Editor—Metal endotracheal tubes are used during laser endoscopic surgery to reduce the risk of airway fires. These tubes are flexible and generally require the use of a stylette to facilitate intubation. Recently, we have become aware of a problem that can occur when plastic-coated stylettes are used with metal endotracheal tubes. The presence of bends or sharp curves in the stylette when inserted into the metal tube may not only make it difficult to remove the stylette at the appropriate time, but, more importantly, during stylette removal, pieces of the plastic coating may be scraped from the surface by the metal edges of the inside of the tube. These plastic pieces may be forced into the airways during positive-pressure ventilation and act as foreign bodies in the lungs. This problem can be avoided by making sure that there are no sharp bends or kinks in the stylette before insertion into the metal endotracheal tube and by testing the stylette for easy removal from the tube.

CHRISTOPHER E. LARSON, D.M.D., M.D.
Resident
Department of Anesthesiology
University of Pittsburgh School of Medicine
Pulse Oximetry is Presently Not an American Society of Anesthesiologists Standard

To the Editor.—The current Standards for Basis Intra-Operative Monitoring, approved by the House of Delegates of the American Society of Anesthesiologists, October 21, 1986, in the section Oxygenation, states, "...quantitative methods, such as pulse oximetry...are encouraged." This is in conflict with the opening sentence in the article by Tremper and Barker which states, "Pulse oximetry has been recommended as a standard for care for every general anesthetic," citing the ASA document as a source of the statement.

Burton S. Epstein, M.D.
Chairman, Committee on Standards

In Reply.—We stand corrected. The House of Delegates of the American Society of Anesthesiologists merely “encouraged” the use of quantitative measures of oxygenation such as pulse oximetry. Encouraged means to “give support to or foster,” whereas recommend means “to counsel or advise,” the latter being construed as a stronger term.1 Perhaps it would have been more appropriate for us to have referenced an editorial appearing in Anesthesiology last year which stated, “We believe that pulse oximetry should become a part of the routine monitoring of all patients undergoing general anesthesia...”2

Kevin K. Tremper, Ph.D., M.D.
Chairman, Department of Anesthesiology
Associate Professor of Anesthesiology

Steven J. Barker, Ph.D., M.D.
Associate Professor of Anesthesiology

References


Accepted for publication February 16, 1989