CORRESPONDENCE

be made by any anesthesiologist in a few minutes from readily available materials.

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References

1. March MG, Crowley JJ: An evaluation of anesthesiologists' present checkout methods and the validity of the FDA checklist. Anesthesiology 75:724–729, 1991

- 2. Hunziker P, Koch JP, Devitt JH: Formalization and implementation of an institutional preanesthetic checklist. (abstract). Can J Anaesth 37:S9, 1990
- 3. Kumar V, Hintze MS, Jacob AM: A random survey of anesthesia machines and ancillary monitors in 45 hospitals. Anesth Analg 67: 644–649, 1988
- 4. Pyles ST, Kaplan RF, Munson ES: Gas loss from Ohio Modulus Vaporizer selector-interlock valve. Anesth Analg 62:1052, 1983

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Unusual Complication of Nasotracheal Suctioning

To the Editor:—It has been the practice in our surgical intensive care unit to insert a soft nasopharyngeal airway to facilitate nasotracheal suctioning. This is done to minimize trauma to the nasal tissues of repeated passage of the tracheal suction catheter. We report an unusual case of respiratory distress due to displacement and aspiration of a nasopharyngeal airway as a result of this practice.

The patient was a 79-y-old, 73-kg man who had undergone an uncomplicated combined three-vessel coronary artery bypass graft procedure and left carotid endarterectomy 2 days previously. The trachea was extubated successfully on postoperative day 1, and he maintained a peripheral arterial hemoglobin oxygen saturation (Spo₂) of 98% while breathing 50% O₂ via face mask. On the morning of the second postoperative day, while breathing 51/min O₂ through nasal cannulae, the Spo₂ decreased to 92%. Because rhonchi were heard, the intensive care nurse elected to perform nasotracheal suctioning. A size 26 Bardex nasopharyngeal airway was lubricated (Surgilube, E. Fougera, Melville, NY), both internally and externally, and passed atraumatically into the left nostril. Next, a 14-Fr 55.9-cm suction catheter (Regu-Vac, Becton Dickinson, Lincoln Park, NJ) was passed through the nasopharyngeal airway.

After partial insertion of suction catheter, the nurse noticed that the nasopharyngeal airway was no longer visible, and the patient complained of respiratory difficulty. Direct visual examination of the oral and nasal cavities failed to reveal the location of the nasopharyngeal airway, and the anesthesiology service was notified emergently. At this time, the patient was agitated and appeared to be in mild respiratory distress with stridorous breath sounds and mild sternal retractions. The blood pressure was 140/57 mmHg, heart rate 63 beats/min, respiratory rate 20 breaths/min, and Spo₂ 85%. The patient's voice was hoarse and attenuated. There was blood in the posterior oropharynx. Incremental doses of midazolam were administered (3 mg total dose), and the oropharynx was sprayed with nebulized local anesthetic. With patient cooperation, direct laryngoscopy was performed, and the proximal (trumpet) end of the nasopharyn-

gcal airway was seen protruding from the glottic opening. The patient was breathing through the nasopharyngeal airway, which was lodged in the trachea. A hemostat was used to extract the nasopharyngeal airway, and the patient immediately returned to normal respiratory function.

In the situation described, the intensive care nurse followed the standard hospital procedure of employing a nasopharyngeal airway as a guide for nasal insertion of a tracheal suction catheter. It is common to use the smallest possible nasopharyngeal airway to minimize nasal trauma and discomfort. On laboratory examination, the 14-Fr tracheal suction catheter passed through a lubricated size 26 Bardex nasopharyngeal airway, although it was a snug fit. However, in the patient described above, anatomic or other factors resulted in the tracheal suction catheter pushing the entire nasopharyngeal airway through the nasopharynx and, aided by patient ventilation, directly into the trachea.

We recommend that, if a nasopharyngeal airway is employed for nasotracheal suctioning, a large well lubricated nasopharyngeal airway be inserted and close attention paid to its position during suctioning.

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