Complications of Rigid Laryngoscopy and Tracheal Intubation

To the Editor:
We read with great interest the article of Lee JJ et al. that describes two complications of tracheal intubation in a neonate.1

We believe, however, that these two complications could have been avoided if the following precautions and techniques were used. (1) Tracheal intubation was achieved after three esophageal intubations. It was not mentioned if the esophageal intubation was done because of difficult airway or involved an endoscopist not experienced in neonatal intubation. If the case was difficult airway and the glottis was not seen, a supraglottic airway such as an Air-Q™ #1.0 (Clearwater, FL) could have been immediately inserted to provide ventilation. If an endotracheal intubation is mandatory, a fiberoptic-guided tracheal intubation through the Air-Q™ can be performed.2 (2) Proper placement of the endotracheal tube (ETT) to 8 cm distance at the lips could have avoided the right endobronchial intubation if the ETT was pulled to 8 cm at the lips and not left at 11 cm while starting positive pressure ventilation. (3) Proper placement of the ETT can be confirmed by: bilateral breath sounds, capnography, and insertion of a lubricated ultra-thin fiberoptic scope through the ETT (Olympus LF-P [Center Valley, PA] with a 2.2 mm external diameter) and confirming placement of the ETT (1.0–1.5 cm) above the carina in this case. If these precautions were followed, the endobronchial intubation and unnecessary surgery for gastric perforation from esophageal intubation could have been avoided. The authors have currently concluded that specialized training and experience are needed for neonatal airway management. However, use of a supraglottic airway as described above improves the likelihood of successful airway management by less experienced clinicians.

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References

Cognitive Dysfunction after Inhalation versus Intravenous Anesthesia in Elderly Patients

To the Editor:
We would like to acknowledge the contribution of Cai et al. in their January 2012 publication “Association between apolipoprotein E4 and postoperative cognitive dysfunction in elderly patients with hip fracture. Anesthesiology 2012; 117:676–87

In Reply:
We read with great interest the letter from El-Ganzouri and Ads. They made helpful comments on our report. It is unfortunate that we did not mention why the complications were developed.

The infant at 33-weeks gestation who weighed 2,050 g was delivered at a private hospital. At birth, the baby was dyspneic, and tracheal intubation was attempted by a physician who lacked experience in neonatal intubation. An endotracheal tube was inserted into the esophagus three times, resulting in marked abdominal distension. Tracheal intubation was successful on the fourth attempt. After 80 min of ventilator care, the baby was tachycardic with an oxygen saturation of 80–90%. He was transferred to our hospital.

I agree that these complications were made more likely by the prior esophageal intubations by a less experienced clinician.

However, all hospitals, especially private hospitals, don’t have experts in airway management available at all times.

The main message of our report remains that immediately after intubation, adequate placement and depth of the endotracheal tube should be confirmed using end-tidal carbon dioxide, auscultation, endotracheal tube depth, and chest x-ray.

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Reference
1. Lee JJ, Ryu BY, Jang JS, Hwang SM: Two complications of tracheal intubation in a neonate: Gastric perforation and lung collapse. ANESTHESIOLOGY 2011; 115:858

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