CORRESPONDENCE

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Proper Use of the Combitube

To the Editor:—We have used the "Combitube" Esophageal Tracheal Double Lumen Airway (Sheridan Catheter, Argyle, NY) for airway management during a small number of routine general anesthetics to gain familiarity with this new product. We recently encountered two cases in which malposition of the Combitube resulted in total inability to ventilate a patient's lungs.

The first patient was a 23-year-old woman, height 163 cm, weight 60 kg, scheduled for fallopian tube microsurgery through a transverse lower abdominal incision. After induction of anesthesia, a Combitube was inserted blindly into the oropharynx and advanced until the printed rings on the tube were adjacent to the patient's incisors, in accordance with the manufacturer's directions. After inflation of both cuffs with the recommended volume of air, ventilation was attempted *via* the side apertures of the Combitube between the two cuffs (Connecting Tube no. 1). No breath sounds could be heard, and with the APL (pop-off) valve closed, the reservoir bag in the circle expanded steadily and felt noncompliant. Ventilation was attempted *via* the distal opening of the Combitube (Connecting Tube no. 2). Breath sounds remained absent, but gurgling was heard over the epigastrium. At this point, we suspected that the Combitube was in the esophagus, as intended, but the pharyngeal cuff was too low in the pharynx, causing respiratory gases from the side apertures of the Combitube to be trapped between the two cuffs (figs. 1 and 2). The tube was slowly withdrawn 3 cm, and ventilation was attempted again *via* the side apertures (Connecting Tube no. 1). Breath sounds were now heard bilaterally, compliance was excellent, and no gastric sounds were heard.

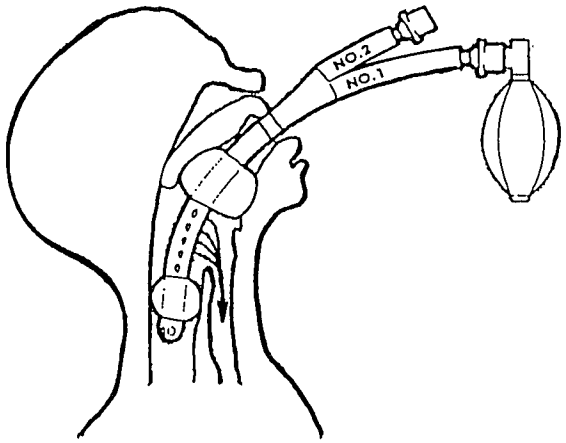

Fig. 1. Correct position of the Combitube in the esophagus, allowing passage of gas from the side orifices into the trachea. Modified from a manufacturer's illustration. Used with permission.

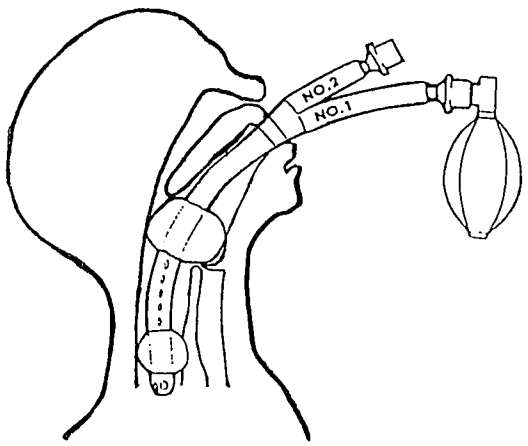

Fig. 2. Excessive insertion depth of the Combitube, causing obstruction of the glottic opening. Ventilation not possible. Modified from a manufacturer's illustration. Used with permission.

In the second case, a 28-y-old man, height 173 cm, weight 78 kg, underwent knee arthroplasty with general anesthesia. A Combitube was inserted using the same technique as in the first case and advanced to the recommended depth. A similar difficulty with ventilation was encountered. As in the first case, ventilation improved when the tube was withdrawn 3 cm.

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