Backward, Upward, Rightward Pressure (BURP) Effect Improves the Glottic View in Retrograde Light-guided Laryngoscopy for Tracheal Intubation

To the Editor:

Yang et al.1 presented an interesting article regarding the use of retrograde light-guided laryngoscopy (RLGL) for tracheal intubation in comparison with conventional direct laryngoscopy. This article is accompanied by an editorial view.2 The results showed that RLGL enables trainees to intubate faster and at higher success rates. An improved Cormack and Lehane grades using RLGL could be the cause. In the text, there is no statement to discuss the possible reasons why RLGL got better glottic view than direct laryngoscopy. As we know, backward, upward, rightward pressure (BURP) maneuver is a useful skill to facilitate glottis visualization for tracheal intubation.3 In Yang's study, there is no description of applying BURP during tracheal intubation in both study groups. If no BURP was applied in direct laryngoscopy group, the improved Cormack and Lehane grades in RLGL group could be due to the “BURP effect” induced by the light-emitting diode flashlight. The site where the flashlight placed in this study (the caudal edge of the thyroid cartilage) is just the same site for BURP maneuver. According to the statement in method section, the operator could adjust and optimize the location of the flashlight while performing the RLGL. Thus, the “BURP effect” should be considered to be the cause of improving glottis view in RLGL group.

Chen-Hwan Cherng, M.D., D.M.Sc., Tri-Service General Hospital and National Defense Medical Center, Taipei, Taiwan. cherng1018@yahoo.com.tw

References


In Reply:

We thank the authors of these letters for their comments that help to clarify the importance of our study to the readers. As regards the letter from Drs. Xue, Cui, and Cherng, we used a 6.5- to 7.5-mm inner diameter endotracheal tube and a laryngoscope with a Macintosh blade, size 3 in all patients in this study. Moreover, all the cases in which intubation was unsuccessful by the novices were successfully intubated by the anesthesiologists with the use of size 3 Macintosh blade. All the patients in this trial were selected by using the stated inclusion criteria, and their characteristics were controlled. The letters above were sent to the author of the referenced editorial, who declined to respond.