



Fig. 1. Example of new presentation of original investigations on a mobile device.

where this section is hidden. We have renamed the section “Science, Medicine, and the Anesthesiologist,” reformatted the section to resemble the look and feel of the journal as a whole, moved it to the front of each edition, and added eye-catching images to draw readers in for a closer look. Later in 2014, we will be adding expanded features, to include infographics that provide intuitive visual representations of complex data derived from published articles; we will also be searching for appealing ways to incorporate more audio and video content in to the electronically accessible versions of the journal. These are just the first changes slated to appear in 2014. We will be actively engaging readers to better understand how *ANESTHESIOLOGY* can benefit all who have interest in the field, clinicians and scientists alike. Do not hesitate to share your own ideas on how to make our journal more interesting and accessible to you.

Competing Interests

The authors declare no competing interests.

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Performance of Retrograde Light-guided Laryngoscopy for Tracheal Intubation

To the Editor:

In a prospective, randomized, open-label, parallel-arm study, Yang *et al.*¹ showed that retrograde light-guided laryngoscopy (RLGL) enabled beginners to intubate patients more

successfully and quickly than conventional direct laryngoscopy. Many things of this study were done correctly. They chose well-validated endpoints: the Cormack and Lehane grades and duration and success rate of tracheal intubation. They have a large number of subjects (200) and attempt to control most of the factors that can significantly affect the laryngeal visualization and subsequent tracheal intubation, such as patient's upper airway anatomy and position, experience of the intubator, uses of anesthetics, and neuromuscular blocking drugs, and many more.^{2,3} All of these are strengths in the study design. However, in this study, other important factors seemed not to be well addressed, such as blade size, type of tracheal tube, use of stylet, and external laryngeal manipulation with the two techniques.

The authors reported that the incidence of Cormack and Lehane grades 3 and 4 laryngeal views was 20% in the RLGL group and 43% in the direct laryngoscopy group, respectively. We would like to know whether a consistent method of Macintosh blade selection was used in the two groups. The proper function of a Macintosh blade is dependent on using an appropriate length of blade. In order to lift the epiglottis out of the line of sight, the Macintosh blade must be long enough to put tension on the glossoepiglottic ligament. Thus, selecting a right blade based on patient's characteristics is necessary for adequate laryngeal visualization. Moreover, in some patients, it may be appropriate to change the length of the blade one time in order to obtain proper blade function.²

Likewise, in method section, it was unclear whether use of optimal external laryngeal manipulation to improve laryngeal views was allowed in the direct laryngoscopy group. According to figure 1 in the article,¹ a large flashlight with weight of approximately 200 g was placed on the caudal edge of the thyroid cartilage for RLGL in the RLGL group. We are concerned that weight of flashlight and backwards force produced by holding the flashlight in place would have resulted in an analogous optimal external laryngeal manipulation. Benumof and Cooper⁴ demonstrated that optimal external laryngeal manipulation can improve the laryngoscopic view by at least one whole grade in adults. Thus, we cannot exclude the possibility that such an analogous optimal external laryngeal manipulation would have biased overall study results into the RLGL group. This may also be an explanation of retrograde transtracheal light transmission to improve laryngoscopy and subsequent tracheal intubation.

In addition, it has been shown that types of tracheal tubes may significantly affect ease, duration, and success rate of tracheal intubation.^{5,6} When a stylet-tracheal tube is used, moreover, stylet bend angles have significant influences on ease of tracheal tube passage and success rate of tracheal intubation.⁷ Thus, we argue that a clear description for types of tracheal tubes and adjuvant use of stylet in method section would further improve the transparency of this study.

Finally, this study excludes the patients with a body mass index of greater than 30 kg/m². Because thickness of the soft tissues of the neck can affect transtracheal light

transmission,⁸ an important question that remains unanswered is whether the RLGL surpasses conventional direct laryngoscopy for tracheal intubation in grossly obese subjects.

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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.

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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 as shown in table 1 of original article.¹ We cannot comment on the effect of Macintosh blade size on the results of this trial, because it was not varied. The stylet bend angles started

The letters above were sent to the author of the referenced editorial, who declined to respond.