Teaching airway management is dependent on the knowledge of the teachers

doi: 10.1111/j.1399-6576.2006.01078.x

Sir,

We read with concern the article by Kurola et al. (1) on the placement of three supraglottic devices by novice paramedical students.

As the CobraPLA (COB) is a relatively new device, it is likely that the teacher’s experience with the laryngeal mask airway (LMA) far exceeded that with COB, and this discrepancy would be imparted to students in their very limited 15-min lecture and mannequin training. Thus, we believe that unintentional bias potentially played a significant role in the results.

We believe that the critical study design error is in the selection of the appropriate size of COB to be used in each patient. Although Kurola et al. state that a size 4 COB ‘should be used’ for patients over 70 kg, an examination of the packaging for all product sizes shows that there are no upper weight limits for any given size of COB and that ‘Proper size CobraPLA is critical for effective insertion and function, smaller is usually better’ (underlining present in product packaging, italics added). As the authors state, the anesthetists chose COBs that were often too large to fit in and function properly, thus negating the results of the study. Given that error, one must also question the quality of the insertion instruction that the students received.
The authors attribute the findings of excessive gastric insufflation when using COB to insertion that is too deep. We believe that, with improper sizing, excessive airway pressures may have been used in an effort to effect ventilation, although the packaging specifically warns against this. In a comparative study on COB and LMA in anesthetized patients, measured stomach gas was similar in both groups (2).

In all current published studies on COB, the placement has been found to be similar to or easier than that of a standard LMA (2–5). Akca et al. (2), using COB in anesthetized paralyzed patients, state that ‘we were surprised that insertion success rates were comparable for the devices although the investigators had years of experience with the LMA but had only inserted the CobraPLA approximately 10 times before starting the study’. Gaitini et al. (3), in anesthetized and non-paralyzed patients, compared the insertion characteristics of COB and LMA. Although the insertion characteristics of LMA reached statistical significance over COB, they were not felt to be clinically important. Others have also found the placement of COB to be relatively easy (4, 5). Whether or not this experience by anesthetists applies to novice paramedical trainees using the intubating LMA cannot be determined by the study of Kurola et al.

Given the above design flaws, the results of the study by Kurola et al. are not valid. More appropriately, one might state that inexperienced users achieve a high failure rate if they choose a size that is too large. In fact, real world experience with the use of COB by well-trained Emergency Medical Service (EMS) personnel has been excellent. For example, in Broward County, FL (population over 1,700,000), the EMS Department has chosen COB over LMA as the supraglottic rescue airway of choice after a head-to-head evaluation by EMS personnel found COB easier to insert than LMA [Michael Weston, personal communication to Engineered Medical Systems, Indianapolis, IN (manufacturer of CobraPLA)].

D. D. Alfery
T. Ezri
O. Ghelber
P. Szmuk

Acknowledgement

Dr Alfery is the inventor of the CobraPLA and receives royalties on sales.

References


Address:
Dr Peter Szmuk
University of Texas South-western Medical School and Anesthesia for Children at Children’s Medical Center Dallas
1935 Motor Street
Dallas, TX 75235
USA
e-mail: ppszmuk@gmail.com