

CORRESPONDENCE

Anesthesiology

1999; 90:1234

© 1999 American Society of Anesthesiologists, Inc.
Lippincott Williams & Wilkins, Inc.

In Reply:—Thank you for allowing us the opportunity to comment on the correspondence submitted in response to our published case report.¹ We agree fully with Drs. Lewis and Collard in their suggestion of having more than one anesthesia provider present when faced with the need to deliver a safe anesthetic while performing complicated monitoring procedures.² Rather than consider formal guidelines, however, we would suggest prudence on the part of the anesthesia provider as to when extra help might be enlisted. We, too, in the teaching environment suggested, had additional trained personnel to perform both tasks adequately. In the private practice arena, my colleagues are invariably available to help while performing tasks that might take one's attention away from providing safe anesthesia.

Dr. Siegel implies that we advanced our catheter into the right ventricle intentionally and without monitoring distal pressures.³ Training for this procedure incorporates practice first in dog models and then with trained clinicians provided by Heartport, Inc. and includes all the steps outlined in his letter. Manipulation of the sterile sheath-encased catheters can sometimes be difficult, and the proximity of the entrance of the coronary sinus to the right ventricle is well known. Since this unfortunate incident, Heartport® has changed the coronary sinus catheter provided to one without a protruding guidewire, which would help reduce the incidence of the perforation we described because the distal pressure transduced would give a better indication of the location of the catheter (in conjunction with transesophageal echocardiography and fluoroscopy).

We agree with Drs. Ortega and Hesselvik⁴ about the incorrect use of terminology; we placed a pulmonary artery vent (essentially a multi-orificed pulmonary artery catheter without a distal balloon), not a stent. They suggest that decreasing the use of the Endocoronary Sinus™ catheter during mitral valve surgery might be faster and safer; we agree. The case we described, however, concerned stenosed coronary arteries and not the mitral valve. We have subsequently joined them in their technique of placing the coronary sinus catheter first. Finally, we referred to nonpump coronary revascularization as being the impetus to developing minimally invasive techniques. Nowhere in our discus-

sion did we refer to the technique used during this case report. Indeed, there are technologies currently available on the market that do not incorporate extracorporeal circulation, known as minimally invasive direct coronary artery bypass (MIDCAB).⁵ Our emphasis concentrated on the difficulty in detecting and treating cardiac perforation.

David C. Abramson, M.B.Ch.B., F.F.A. (S.A.)

Associate Professor

Andrew Gianotti

Medical Student

Department of Anesthesiology

University of Texas

Houston Health Science Center

Houston, Texas 77030

dabrams@anes1.med.uth.tmc.edu

References

1. Abramson DC, Giannotti AG: Perforation of the right ventricle with a coronary sinus catheter during preparation for minimally invasive cardiac surgery. *ANESTHESIOLOGY* 1998; 89:519-21
2. Lewis WR, Collard CD: Are guidelines needed for the performance of invasive interventional procedures for minimally invasive cardiac surgery?. *ANESTHESIOLOGY* 1999; 90:???-???
3. Siegel LC: Coronary sinus catheterization for minimally invasive cardiac surgery. *ANESTHESIOLOGY* 1999; 90:???-???
4. Ortega RA, Hesselvik JF: Reducing the risk of perforation of the right ventricle during Port-Access minimally invasive cardiac procedures. *ANESTHESIOLOGY* 1999; 90:???-???
5. Matsuda H, Sawa Y, Takahashi T, Hirata N, Ohtake S: Minimally invasive cardiac surgery: Current status and perspective. *Artif Organs* 1998; 22:759-64

(Accepted for publication December 7, 1998.)

Anesthesiology

1999; 90:1234-5

© 1999 American Society of Anesthesiologists, Inc.
Lippincott Williams & Wilkins, Inc.

Conflict of Interest and the COPA

To the Editor:—We read with interest the article by Greenberg *et al.*,¹ demonstrating equivalent clinical use of the cuffed oropharyngeal airway (COPA) and the laryngeal mask airway (LMA). However, we are now confused to find that the two coauthors of this article, Drs. Brimacombe and Berry, reported contradictory results elsewhere (*i.e.*, the COPA is inferior to the LMA) only a few months later.² The latter investigation was conducted at the same two Australian institutions where more than two thirds of the patients in the article by Greenberg *et al.* were also studied. These contradictory reports have led us to suspect that the difficulties with the COPA reported by Greenberg *et al.*

occurred predominantly at the two Australian institutions, whereas this device worked well at Johns Hopkins, where the remainder of the patients were studied. Greenberg *et al.* report "adverse events" on a hospital-by-hospital basis, they but do not present institution-specific results of their measurements. Such information would help resolve this issue.

These discrepancies between studies involving the same authors is obviously worrisome. Furthermore, if the results of Greenberg *et al.* contain such interinstitutional discrepancies, the obvious question is why? Dr. Greenberg notes that he refrained from personal involvement

CORRESPONDENCE

in patient care at Johns Hopkins. Were Drs. Brimacombe and Berry similarly uninvolved in their institutions, and is it possible that such differing physician involvement and supervision may play some role in the different results?

We look forward to the authors' response.

Takahisa Goto, M.D.
Shoichi Uezono, M.D.
 Department of Anesthesia
 Teikyo University Ichihara Hospital
 3426-3 Anesaki
 Ichihara-shi, Chiba
 299-0111, Japan
 takigoto@med.teikyo-u.ac.jp

Anesthesiology

1999; 90:1235

© 1999 American Society of Anesthesiologists, Inc.
 Lippincott Williams & Wilkins, Inc.

In Reply:—We, as a research team, are concerned about the issues raised by Drs. Goto and Uezono and appreciate the opportunity to consider them openly. Clearly, we can only comment on the larger, FDA-monitored multicenter study published in *ANESTHESIOLOGY*.¹

Simply put, our study was a comparison between the COPA and LMA and not between sites. The valid comparison designed in the study is therefore between *devices* at each site and summarized in table 7 of the article. For instance, we compare the LMA *versus* COPA regarding the occurrence of any adverse event (81% *vs.* 61% at The Johns Hopkins Medical Institutions, 48% *vs.* 30% at Cairns Base Hospital, and 42% *vs.* 39% at Nambour General Hospital). Looking at these comparisons, one must recognize that the COPA did at least as well as the LMA. However, one might consider why events were more frequently reported at The Johns Hopkins Medical Institutions for both devices (either because of more overall problems or perhaps superior recognition and recording). In fact, based on this analysis, the Australian sites did not have more difficulty with the COPA compared with the LMA; in only two instances were the percentage of adverse events higher with the COPA.

We have made every effort to perform and report our research in the most unbiased way possible. Because we did not participate in the study reported in *Anesthesia & Analgesia*, we are unable to comment

Anesthesiology

1999; 90:1235-6

© 1999 American Society of Anesthesiologists, Inc.
 Lippincott Williams & Wilkins, Inc.

In Reply:—Drs. Goto and Uezono are incorrect in stating that the study by Brimacombe *et al.*¹ was conducted at the same two Australian institutions as the study by Greenberg *et al.*² It was conducted only at Cairns Base Hospital, and Dr. Berry did not directly participate in the clinical aspects of the trial.

We disagree that the results of these trials are "contradictory." In terms of ease of placement, time taken to achieve an adequate airway, first time placement success rates, airway sealing pressure, the number of airway interventions required, and postoperative jaw and neck pain, both trials showed that the laryngeal mask airway (LMA) was the better device. The main contradictory result was that the multicenter trial showed that the

References

1. Greenberg RS, Brimacombe J, Berry A, Gouze V, Piantadosi S, Dake EM: A randomized controlled trial comparing the cuffed oropharyngeal airway and the laryngeal mask airway in spontaneously breathing anesthetized adults. *ANESTHESIOLOGY* 1998; 88: 970-7
2. Brimacombe JR, Brimacombe JC, Berry AM, Morris R, Mecklem D, Clarke G, Barry J, Kirk T: A comparison of the laryngeal mask airway and cuffed oropharyngeal airway in anesthetized adult patients. *Anesth Analg* 1998; 87:147-52

(Accepted for publication December 14, 1998.)

on the actual design or conduct of their study or effort to control for personal bias, etc. We are therefore unable to comment on the differences in conclusions between the two papers.

Robert S. Greenberg, M.D.
 rgreenbe@welchlink.welch.jhu.edu
Victoria Gouze, M.D.
Steven Piantadosi, M.D., Ph.D.
Elizabeth M. Dake, M.S.
 The Johns Hopkins Medical Institutions
 Baltimore, Maryland

Reference

1. Greenberg RS, Brimacombe J, Berry A, Gouze V, Piantadosi S, Dake EM: A randomized controlled trial comparing the cuffed oropharyngeal airway and the laryngeal mask airway in spontaneously breathing anesthetized adults. *ANESTHESIOLOGY* 1998; 88:970-7

(Accepted for publication December 14, 1998.)

cuffed oropharyngeal airway (COPA) was associated with a lower incidence of oropharyngeal trauma and that the single-center trial had a higher incidence. We consider the postoperative data from the single-center trial more reliable because data collection was double-blinded. Although superficially similar, the two trials were not methodologically identical, and comparisons should be made cautiously. Notable differences were that the multicenter trial involved 62 variably experienced investigators conducting variable case numbers, more than 20 data collectors, unequal-sized groups, total intravenous anesthesia with propofol, and emergence either in the operating room or the post-anesthesia care unit. The single-center trial involved four experienced investigators con-