Osborn et al. imply. The LMA™ should not be confused with the LMA-P™. It is not a single-use LMA-P™ because substantial details are designed and constructed in a different way to overcome weaknesses of other LMA™, as the producers of the LMA-S™ promote their device. The LMA-S™’s clinical performance can only be evaluated in clinical trials. First published comparisons with a reasonable sample size between the LMA-P™ and LMA-S™ showed clinically important differences in the seal pressure between both devices.

We affirm our statement that acute airway obstruction of LMAs™ can occur at any time, and backup strategies for the failure of the backup device LMA-P™ have to be considered.

Lorenz G. Theiler, M.D.,* Maren Kleine-Brueggeney, M.D., Robert Greif, M.D., M.M.E. *University Hospital Bern, Bern, Switzerland. lorenz.theiler@insel.ch

References


To the Editor.—I read with interest the article by Kheterpal et al.1 However, I am concerned that they did not control for hypothermia in their analysis. Hypothermia is considered to be a risk factor for morbid cardiac events.2,3 Without controlling for this variable, the risk assigned to their nine variables may be different than what was reported. For example, suppose the elderly patients became hypothermic more readily than the nonelderly patients. If this was the case, then the risk factor of being elderly may be overestimated, as it could have been the hypothermia and not the age that caused the problem in the elderly patient. I suspect that accurate core temperatures were not measured in most, if not all, patients who did not receive general anesthesia. However, the study population seems large enough to allow for a separate analysis of patients who did have their core temperature recorded. Do the authors have any temperature analysis that was not reported in the article?

Jonathan V. Roth, M.D., Albert Einstein Medical Center, Philadelphia, Pennsylvania. rothj@einstein.edu

References


In Reply.—We thank Dr. Roth for his interest in our article and insightful commentary. Previous literature has demonstrated an association between intraoperative hypothermia and cardiac adverse events. However, we did not evaluate this clinical element in our analysis for several reasons. First, previous data regarding hypothermia and cardiac adverse events is limited to high-risk patients who had a preexisting diagnosis of coronary artery disease or several known risk factors for coronary artery disease undergoing high-risk thoracic, intraperitoneal, or vascular procedures.4 Although our dataset included some high-risk patients, only 9.6% had a previous cardiac intervention and only 22% were undergoing high-risk surgery.5 As a result, the studied population was dissimilar to previous work, and we were skeptical of being able to identify an association between hypothermia and cardiac adverse events in this more representative population. Second, although our studied dataset was large, we were only able to observe 83 events. As a result, we had to limit the number of independent variables evaluated in the logistic regression full-model fit to reduce the impact of model overfitting.5 Hypothermia was one of several independent variables that we were unable to assess because of this statistical analysis constraint.

Finally, the absence of a consistent way to separate “hypothermic” versus “normothermic” groups in an observational dataset presented the final challenge. There are several ways to define hypothermia. First, we could evaluate median temperatures within 10-min epochs, similar to the presented hypotension analysis. Second, some may advocate that a single temperature measurement below 36°C would qualify as “hypothermic.” Third, others may suggest that we employ the absence of active warming to be consistent with prospective, controlled studies.

We agree that intraoperative hypothermia should be evaluated in future studies. We look forward to conducting large, multicenter observational dataset analyses that may offer us the statistical power necessary to do so.