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LETTERS TO THE EDITOR

Ventilation strategies during robot-assisted thoracoscopic esophagectomy

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We read with great interest the article by Choi and colleagues reporting the effects of volume-controlled ventilation (VCV) and pressure-controlled ventilation (PCV) on oxygenation and intrapulmonary shunting during one-lung ventilation in robot-assisted thoracoscopic esophagectomy (RTE) with the patient in the prone position [1]. Because the results of their randomized clinical study indicate that PVC provides no advantage over VCV, the authors conclude that both ventilation techniques can be applied safely during RTE with the patient in the prone position. Although this is an interesting study providing new insights into this specific field of anaesthesiology, some remarks need to be made.

First, the study population was randomly divided into two groups, yet the authors omitted an overview of the baseline characteristics of both study groups. This raises the question whether there were statistically significant differences between the two groups. Second, the authors failed to describe intraoperative data such as total surgery time and blood loss that may have influenced the end points of this study. Additionally, the primary outcomes were limited to hemodynamic and respiratory variables. It would have been of greater clinical interest if the authors had analyzed the effect of the different ventilation strategies on postoperative outcomes, such as intensive care unit stay and postoperative pulmonary morbidity (e.g., pneumonia, atelectasis, and adult respiratory distress syndrome).

In 2006, we extensively described our surgical technique of RTE with the patient in the left lateral decubitus position [2]. Our short- and midterm results for 47 esophageal cancer patients who underwent RTE have shown this technique to be very promising [3]. Regrettably, Choi and colleagues did not describe the surgical technique of RTE with the patient in the prone position. We look forward to a new publication of this research group on this topic.

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References

1. Choi YS, Shim JK, Na S, Hong SB, Hong YW, Oh YJ (2009) Pressure-controlled versus volume-controlled ventilation during one-lung ventilation in the prone position for robot-assisted esophagectomy. Surg Endosc (Epub ahead of print)
2. van Hillegersberg R, Boone J, Draaisma WA, Broeders IA, Giezeman MJ, Borel Rinkes IH (2006) First experience with robot-assisted thoracoscopic esophagolymphadenectomy for esophageal cancer. Surg Endosc 20(9):1435–1439
3. Boone J, Schipper MEI, Moojen WA, Borel Rinkes IHM, Cromheecke GJE, van Hillegersberg R (2009) Robot-assisted thoracoscopic esophagectomy for esophageal cancer: short- and mid-term results. Br J Surg (accepted for publication)

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