General Thoracic and Cardiovascular Surgery (2022) 70:1062–1063
https://doi.org/10.1007/s11748-022-01870-y

LETTER TO THE EDITOR

Postoperative pulmonary complications after minimally invasive esophagectomy: some practical issues

Dipasri Bhattacharya[1] · **Antonio M. Esquinas**[2] · **Mohanchandra Mandal**[3]

Received: 5 August 2022 / Accepted: 19 August 2022 / Published online: 26 August 2022

To the Editor,

We have read with great interest the article of Ishikawa et al. [1] who have identified one-lung ventilation and volume of crystalloid to be modifiable risk factors for early postoperative pulmonary complications (PPCs) in patients undergoing minimally invasive esophagectomy (MIE) in prone position. However, we think clarity on the following points might help overall evaluation regarding the outcome of their study.

First, the impaired preoperative pulmonary function is a known risk factor for PPC. It would be interesting to know whether the 'lung age' was assessed by derivation from the inverse calculation of the FEV_1 standard regression equation [2]. The 'lung age' is associated with the occurrence, severity and time of onset of pneumonia after esophagectomy.

Second, extensive lymph node dissection along the pathway of recurrent laryngeal nerves (RLNs) is found to be associated with increased risk of RLN injury which is associated with difficulties with swallowing, pulmonary aspiration, high incidence of pneumonia, and thereby compromised postoperative life quality [3]. The incidences of complications are influenced by the MIE technique adopted and the extent of lymph node dissection [3]. It would be interesting to have a nitty–gritty of the MIE procedure.

Lastly, the mean crystalloid requirement was higher (4200 ml) in those who suffered PPC than who did not (3550 ml). However, the fluid requirement was as such high in both the groups, as some of their patients with poor preoperative conditions (e.g., hypovolemia) received more crystalloid intraoperatively. Positive fluid balance in first postoperative day was found to be an independent risk factor for PPCs in patients after esophagectomy for cancer [4]. Crystalloid infusion of ≥ 1500 mL in the first postoperative 24 h is a major risk factors for PPC [5].

Funding No funding other than personal was used in conducting as well as writing the manuscript. We declare that we have no financial and/or personal relationships with other people or organizations that could inappropriately influence (bias) our work.

Declarations

Conflict of interest Dr. Dipasri Bhattacharya has declared that she has no conflict of interest, Dr. Antonio M. Esquinas has declared that he has no conflict of interest, Dr. Mohanchandra Mandal declares that he has no conflict of interest.

Ethical approval As this manuscript is not an 'original article' or 'clinical investigation' and does not directly deal with investigation with animal and human research, the issue of Institute's Ethics Committee does not arise. The manuscript deals with some comments or constructive criticism to a published article of other author.

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This comment refers to the article available online at https://doi.org/10.1007/s11748-022-01818-2.

✉ Mohanchandra Mandal
drmcmandal@gmail.com

Dipasri Bhattacharya
dipasribhattacharya123@gmail.com

Antonio M. Esquinas
antmesquinas@gmail.com

[1] Department of Anaesthesiology, Pain Medicine and Critical Care, R. G. Kar Medical College, Kolkata, West Bengal, India

[2] Intensive Care Unit, Hospital Morales Meseguer, Murcia, Spain

[3] Department of Anaesthesiology and Critical Care, Institute of Post Graduate Medical Education and Research/S.S.K.M. Hospital, Kolkata, West Bengal, India

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