

Non-invasive mechanical ventilation in postoperative esophagectomy. Is a safe and efficacy indication always?

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Dear Editor,

Acute respiratory distress syndrome (ARDS) in postoperative esophagectomy surgery associated poor outcomes (1). In this context, measurements to prevent reintubation as early use of non-invasive positive pressure ventilation (NIPPV) could reduce prevalence of complications (2). However, NIV in postoperative ARDS is still a controversial task (3).

Yu KY *et al.* (4) evaluated efficacy of NPPV in the treatment of ARDS following esophagectomy for esophageal cancer. This study opens a great contribution for management of postoperative ARDS and prevents associate complications. However, although authors described favourable effects on gas exchange after NIV at 24 hours and minor surgery-related complications, there are some key practical aspects to need comments regarding use of NIV.

First, in subgroup of ARDS patients associated with excessive airways secretions authors applied systematic use of bronchoscopy to remove secretions (5). Although, this combination of NIV-bronchoscopy is a well-known association, it is not clear if could be systematic indications for all patients and if it could be deleterious in severe high risk hypoxemic patients (6). This is not properly reflected by the authors.

Second, NPPV in early esophageal surgery may have a relative contraindication for application of positive pressure at high level (7) with and risk of loss of integrity esophageal sutures (8). This aspect is not adequately taken into account and secondary esophageal perforation is plausible.

Third, information regarding, positive pressure and respiratory parameters as tidal volume were not reported. This is interesting, because previous studies consider that

limit of 15 cm H₂O for inspiratory pressure support and 5 cm H₂O for positive end-expiratory pressure are safe. What range of positive pressure was applied and recommend by authors?

In this context, achieve a more favourable outcomes in postoperative esophagectomy ARDS patients, but further clinical studies are necessary to define methodology and some key practical aspects of NIPPV.

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