

Lung-protective ventilation ups outcomes post-abdominal op

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(HealthDay)—For patients at intermediate to high risk of pulmonary complications after major abdominal surgery, lung-protective ventilation with the use of low tidal volumes and positive end-expiratory pressure is associated with improved clinical outcomes, according to a study published in the Aug. 1 issue of the *New England Journal of Medicine*.

Emmanuel Futier, M.D., from the Hôpital Estaing in Clermont-Ferrand, France, and colleagues conducted a multicenter, double-blind, parallel-group trial in which 400 adults at intermediate to high risk of pulmonary complications after major [abdominal surgery](#) were randomly allocated to receive non-protective [mechanical ventilation](#) or lung-protective

ventilation.

The researchers found that the primary outcome (composite of major pulmonary and extrapulmonary complications occurring within seven days of surgery) occurred in 10.5 percent of the lung-protective ventilation group versus 27.5 percent of the non-protective ventilation group (relative risk, 0.40). Five percent of the lung-protective ventilation group and 17 percent of the non-protective ventilation group required noninvasive ventilation or intubation for acute respiratory failure (relative risk, 0.29) over the seven-day postoperative period. The length of hospital stay was significantly shorter for patients receiving lung-protective ventilation.

"In conclusion, our study provides evidence that a multifaceted strategy of prophylactic lung-protective ventilation during surgery, as compared with a practice of non-protective mechanical ventilation, results in fewer [postoperative complications](#) and reduced health care utilization," the authors write.

Several authors disclosed financial ties to the biopharmaceutical industry.

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