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D. Li, M. S. Fabus, J. W. Sleigh.....290

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Perioperative Medicine

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◆ Perioperative Neurofilament Light Plasma Concentrations and Cognition before and after Cardiac Surgery: A Prospective Nested Cohort Study
C. H. Brown IV, A. Lewis, J. Probert, M. Parish, J. Tian, K. Mandal, A. Everett, E. Colantuoni, V. Kamath, C. Hogue, A. Moghekar.....303

In an observational study of 167 cardiac surgery patients nested within a randomized controlled study of blood pressure management, higher baseline neurofilament light concentration in blood is associated with worse baseline cognition, but improvement in cognition at 1 yr. An increase in neurofilament light on postoperative day 1 is associated with a greater decline in cognition at 1 yr. *SUPPLEMENTAL DIGITAL CONTENT IS AVAILABLE IN THE TEXT*

◆ Volatile versus Propofol General Anesthesia and Long-term Survival after Breast Cancer Surgery: A National Registry Retrospective Cohort Study
M. Enlund, A. Berglund, A. Enlund, L. Bergkvist.....315

Using data combining two national Swedish clinical registries from 2013 to 2019 for 18,674 breast cancer surgery patients, the authors observed that 13,873 (74.3%) received propofol general anesthesia and 4,801 (25.7%) received inhaled volatile general anesthesia. In a propensity score-matched cohort of 9,316 patients, there was no difference in overall survival between patients receiving propofol general anesthesia (4,284 of 4,658; 92.0%) versus inhaled volatile general anesthesia (4,288 of 4,658; 92.1%). *SUPPLEMENTAL DIGITAL CONTENT IS AVAILABLE IN THE TEXT*

Critical Care Medicine

CLINICAL SCIENCE

◆ Early Physiologic Effects of Prone Positioning in COVID-19 Acute Respiratory Distress Syndrome
F. Zarantonello, N. Sella, T. Pettenuzzo, G. Andreatta, A. Calore, D. Dotto, A. De Cassai, F. Calabrese, A. Boscolo, P. Navalesi327

Using electrical impedance tomography, the authors assessed the percent variation of ventilation-perfusion matching before and after 90 min of the first cycle of prone positioning in 30 intubated, sedated, and paralyzed adult COVID-19 acute respiratory distress syndrome patients along with additional secondary pulmonary physiologic endpoints. Overall, prone positioning improved ventilation-perfusion matching significantly with a median difference of 8% with no change in dorsal perfusion. Lung overdistention was also significantly reduced. Pao₂/fraction of inspired

◆ Refers to This Month in ANESTHESIOLOGY

◆ Refers to Editorial

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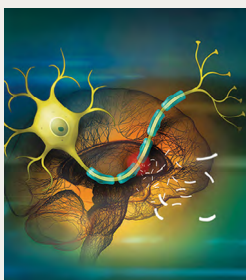
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OPEN



ON THE COVER: Postoperative increases in neurofilament light have been associated with delirium after non-cardiac surgery; however, few studies have examined this association in cardiac surgery patients. In this issue of ANESTHESIOLOGY, Brown *et al.* tested the hypothesis that increased neurofilament light would be associated with worse neuropsychological status after cardiac surgery. Cover illustration: A. Johnson, Vivo Visuals Studio.

• Brown *et al.*: Perioperative Neurofilament Light Plasma Concentrations and Cognition before and after Cardiac Surgery: A Prospective Nested Cohort Study, p. 303–14

oxygen improved overall, although 30% of the cohort were classified as nonresponders (less than 20% increase from baseline). *SUPPLEMENTAL DIGITAL CONTENT IS AVAILABLE IN THE TEXT*

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ORIGINAL INVESTIGATION IN EDUCATION

  **Inappropriate Citation of Retracted Articles in Anesthesiology and Intensive Care Medicine Publications**
A. De Cassai, F. Geraldini, S. De Pinto, I. Carbonari, M. Cascella, A. Boscolo, N. Sella, F. Monteleone, F. Cavaliere, M. Munari, E. Garofalo, P. Navalesi.....341

The Retraction Watch database was used to identify 478 retracted anesthesiology and critical care medicine articles, 220 (46%) of which were cited at least once after retraction. A survey was sent to 417 of the corresponding authors of the articles citing retracted articles (30% of 1,402 such articles) who could be contacted and agreed to participate in a survey designed to determine reasons for citation of retracted articles. Most of the corresponding authors (n = 372, 89%) were unaware that they had cited a retracted article largely because of missed identification of the retraction status in the journals or search database (n = 229, 62%) and use of a stored copy of the article (n = 42, 11%). *SUPPLEMENTAL DIGITAL CONTENT IS AVAILABLE IN THE TEXT*

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A. J. Gregory, E. S. Di Martino, P. W. M. Fedak, G. M. Dobson351

The aorta contributes to cardiovascular physiology and function. Understanding biomechanics in health, disease, and after aortic interventions will facilitate optimization of perioperative patient care.

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