

A clearer view on postoperative cognitive dysfunction? [Letter]

Gijsbert J van der Veen
Cornelis Slagt

Department of Anaesthesia, Pain
and Palliative Medicine, Radboud
University Medical Center, Nijmegen,
The Netherlands

Dear editor

Fathy et al¹ rightfully emphasize the importance of postoperative cognitive dysfunction (POCD) as it is associated with longer length of in-hospital stay and an increased mortality in the first year after surgery.^{2,3} However, in contrast to the conclusion made by Fathy et al, it is not anesthesia and surgery that are risk factors for the development of POCD.⁴ Baseline patient characteristics (education level, age, frailty) and in-hospital delirium are major contributors for the development of POCD.²⁻⁴ Subsequently there were no differences found in the incidence of POCD between regional vs general anesthesia.⁵ Although Fathy et al target a very vulnerable patient group with respect to risk factors of developing POCD, it is very unlikely, in relation to the aforementioned, that there will be a difference in incidence between two local anesthetics. Fathy et al confirm this in their own study;¹ there is a similar (nonsignificant) incidence of POCD in patients receiving lidocaine and in patients receiving bupivacaine during cataract surgery. So, the challenge in the prevention of POCD is not in the anesthetic technique or drug, but in the identification and treatment of modifiable risk factors and postoperative delirium.

Disclosure

The authors report no conflicts of interest in this communication.

References

1. Fathy W, Hussein M, Khalil H. Effect of local anesthesia (with lidocaine vs bupivacaine) on cognitive function in patients undergoing elective cataract surgery. *Local Reg Anesth*. 2019;12:1–6.
2. O' Brien H, Mohan H, Hare CO, Reynolds JV, Kenny RA. Mind over matter? The hidden epidemic of cognitive dysfunction in the older surgical patient. *Ann Surg*. 2017;265(4):677–691.
3. Monk TG, Weldon BC, Garvan CW, et al. Predictors of cognitive dysfunction after major noncardiac surgery. *Anesthesiology*. 2008;108(1):18–30.
4. Hughes CG, Patel MB, Jackson JC, et al. Surgery and anesthesia exposure is not a risk factor for cognitive impairment after major noncardiac surgery and critical illness. *Ann Surg*. 2017;265(6):1126–1133.
5. Berger M, Schenning KJ, Brown CH, et al. Best practices for postoperative brain health: recommendations from the Fifth International Perioperative Neurotoxicity Working Group. *Anesth Analg*. 2018;127(6):1406–1413.

Correspondence: Gijsbert J van der Veen
Department of Anaesthesia, Pain and
Palliative Medicine, Radboud University
Medical Center, Geert Grooteplein-Zuid
10, 6500 HB Nijmegen, The Netherlands
Email Gijs.vanderVeen@radboudumc.nl

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