



## ARTICLE OF THE MONTH

### Preoperative Cognitive Stratification of Older Elective Surgical Patients: A Cross-Sectional Study

Culley DJ, Flaherty D, Reddy S, Fahey MC, Rudolph J, Huang CC, Liu X, Xie Z, Bader AM, Hyman BT, Blacker D, Crosby G.  
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Welcome to the August 2016 installment of the SNACC Article of the Month! In this article, Dr. Culley *et al* looks at the prevalence of cognitive impairment in surgical patients aged 65 and older and at the feasibility of testing for preoperative cognitive dysfunction in a busy preoperative assessment clinic. The article offers an interesting perspective on the perioperative implication of cognitive impairment and the importance of preoperative cognitive screening in seniors. The two tests used for evaluation here, Mini-Cog and Clock-in-the Box, are brief and easily administered, which makes them appealing to use in a preoperative evaluation clinic setting. This month, we have Dr. Stacie Deiner giving us her thoughts on this article. Stacie Deiner is an Associate Professor of Anesthesiology, Neurosurgery, Geriatrics and Palliative Care at the Icahn School of Medicine at Mt. Sinai Hospital New York, NY. Her clinical practice is as a neurosurgical anesthesiologist. Her research interests include perioperative cognitive dysfunction and delirium in geriatric surgical patients. She was a GEMMSTAR/Jahnigen scholar (2011-2013) and Alzheimer's Disease Research Center Pilot Awardee, which supported her study: "The geriatric patient; anesthetics, stress, and functional outcomes." She is an active member of the Society for Neurosurgical Anesthesia, American Geriatrics Society, and the Society for Geriatric Anesthesia. She has served as a member of the AGS panel which has recently published the *Delirium Guidelines and Best Practices* document. Her goal is to create perioperative interventions which will decrease the burden of POCD and improve postoperative recovery for elderly surgical patients. We encourage all of our readers to tell us what they think by joining us on [SNACC LinkedIn feed](#) the [Twitter feed](#), or the [Facebook page](#).

~ Oana Maties, MD and John F. Bebawy, MD

### Commentary

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Brain health is a major priority for the field of anesthesia. This year, we highlight concerns regarding cognitive function in the elderly at the ASA meeting. Groups such as the American College of Surgeons and American

Geriatrics Society have stepped forward to partner with anesthesiologists to improve the care of the older adult. While all agree that supporting best practice and outcomes for the rapidly expanding older population, many are concerned regarding adding practice measures to our already busy perioperative routines.

To date, assessment of cognitive function in the perioperative period is generally only undertaken in the context of research, working with neuropsychiatrists. In contrast, assessment of delirium can be performed using a flow sheet by trained non-physicians. This month, *Anesthesia and Analgesia* published an article by Culley *et al* which described the use of brief preoperative cognitive testing in a pre-surgical testing clinic. In this important study, Cully *et al* show us that not only can cognition be assessed by lay people, but that it can be done quickly, with high interrater reliability. Furthermore, the testing was very much supported by the patients.

Using two very short tests, the group was able to ascertain that greater than 20% of their elderly patients had pre-existing cognitive dysfunction. This is hugely important because patients with pre-existing cognitive dysfunction are much more likely to develop delirium and further cognitive decline. And there are more subtle but important issues, such as the ability to consent and participate in recovery, impact on discharge disposition and planning. Routine cognitive screening in the preoperative testing clinic is on the path to better global pre-operative evaluation of the older adult. As we begin to understand the role of pre-existing cognitive impairment, we can better anticipate the broader needs of these patients as they recover from surgery.