



Anaesthetists push for targeted delirium and memory loss research

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An Australian-led global group of doctors and scientists is calling for a new definition of delirium and memory loss experienced by some older patients after surgery that could improve treatment, research and funding for conditions such as Alzheimer's disease and cognitive decline.

Associate Professor Lis Evered, Scientific Head of Research in the Department of Anaesthesia at St Vincent's Hospital Melbourne and Professor David A Scott, Director of the hospital's Department of Anaesthesia and Acute Pain Medicine said cognitive decline after anaesthesia and surgery was a growing concern for patients and their families, especially those aged over 65.

Up to one third of patients over 65 experience temporary memory issues one week after surgery while one in ten patients still experience some form of cognitive deficit three months on.

Associate Professor Evered and Professor Scott are members of an international team of doctors, scientists and researchers from institutions including the Mayo Clinic, the Johns Hopkins University School of Medicine, the University of Copenhagen and the Harvard Medical School who want the new definition to be adopted globally by clinicians and medical professionals.

"These recommendations will lead to a more meaningful diagnosis of patients, leading to better care and better communication amongst clinicians. It will also improve the relevance of research," Professor Scott said.

The recommendations have been published in a research paper in six international journals including the *British Journal of Anaesthesia*, *Anesthesiology*, *Anesthesia and Analgesia* and the *Journal of Alzheimer's Disease*.

The paper calls for cognitive changes in patients before and after surgery to be formally recognised as a "perioperative neurological disorder" as defined in the *Diagnostic and Statistical Manual for Mental Disorders, (fifth edition)*, the international handbook of mental health conditions.

Doctors and clinicians currently use a range of terms such as "post-operative delirium" and "post-operative cognitive impairment" when describing cognitive changes in patients. Cognitive decline can range from short term confusion after surgery through to delirium and medium and long term cognitive change.

Associate Professor Evered said the number of patients aged 60 and over undergoing anaesthesia and surgery had increased significantly and is projected to increase further as the population ages.

In Australia patients aged over 60 receive nearly one third of all anaesthetics administered although they represent only 14 per cent of the population.

"By 2050 they will comprise 25 per cent of the population and receive 50 per cent of all anaesthetics administered in Australia," she said.

"The new clinical definition will offer a framework for understanding the impact of anaesthesia and surgery on outcomes, care and management for the elderly and thereby enhance care and the consistency of communication and reporting."

The project received funding through leading international Alzheimer's research groups including the Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART).

"Anaesthesia is not sleep. It's so much deeper" is the theme for the Australian and New Zealand College of Anaesthetists (ANZCA) 2018 National Anaesthesia Day which falls on Tuesday October 16. The day is organised by ANZCA and marks the first time ether anaesthesia was demonstrated in Boston, Massachusetts 172 years ago.