

Study shows prevention, treatment of ICU acquired delirium requires personalized approach

December 13 2018

A population health study from the Regenstrief Institute and Indiana University Center for Aging Research has determined that haloperidol, the drug most commonly used to treat delirium in hospital medical and surgical intensive care units (ICUs), did not benefit elective thoracic surgery ICU patients when given prophylactically, with the possible exception of those who have had surgery to remove their esophagus. The study results indicate the need for a personalized approach to delirium in the ICU.

The work is the first to evaluate the use of the antipsychotic drug haloperidol to reduce [post-operative delirium](#) in [elderly patients](#) undergoing elective non-cardiac thoracic [surgery](#).

Researchers found no differences in delirium incidence or severity between haloperidol and placebo in [patients](#) who had undergone elective non-cardiac thoracic surgery except in the small number of study participants who were admitted to the ICU after removal of the esophagus, a procedure known as esophagectomy. Removal of this organ is a treatment for esophageal cancer.

"Our work suggests that just as you can't lump all [cancer patients](#) together for treatment, you can't put all delirium patients in the same bucket," said Regenstrief Institute investigator Babar A. Khan, M.D., M.S., who led the new study published in the *Journal of the American*

Geriatrics Society. "We need a personalized approach to delirium, focusing on people at higher risk of developing this complication."

He notes that while elective surgery patients typically are healthier than other ICU patients, they are very much at risk of delirium. He counsels those considering elective surgery to consult with their primary care clinicians and their surgeon to weigh the significant risks of delirium with the benefits of the proposed procedure.

Dr. Khan is also a co-author of the groundbreaking October 2018 *New England Journal of Medicine* study that reported that haloperidol did not significantly alter the duration of delirium in ICU patients.

"Because we now know that haloperidol, the most commonly used drug to treat ICU delirium doesn't, with possibly few exceptions, work, we need to focus on nonpharmacological therapies and vigilantly curtail administration of drugs that are harmful to the brain, especially the aging brain," said Dr. Khan.

Approximately five million Americans are admitted to a surgical or medical ICU annually. Delirium, a sudden and serious change in [brain function](#) causing confusion, occurs in as many as three quarters of those treated in the ICU. Causes include sepsis, metabolic problems such as liver and kidney disease as well as drugs that injure the brain.

Individuals who experience delirium are more likely to have longer hospital stays and hospital-associated complications. They also have a greater likelihood of dying in the hospital for up to a year after their hospital stay than ICU patients who did not experience delirium. They are also more likely to lose physical functioning and experience cognitive impairment.

"This landmark study represents a first attempt to reduce the incidence

and morbidity of delirium in the postoperative patient," said thoracic surgeon Kenneth Kesler, M.D., Harris B. Shumacker Professor of Surgery at IU School of Medicine, senior author of the JAGS study. "Although unfortunately an overall negative study, it does move us forward by identifying both a subset of patients who may benefit from haloperidol prophylaxis and those patients who are at risk for [delirium](#) following large surgical procedures."

More information: "Preventing Post-operative Delirium after Major Non-Cardiac Thoracic Surgery-A Randomized Clinical Trial" *Journal of the American Geriatrics Society* (2018).

Provided by Regenstrief Institute

Citation: Study shows prevention, treatment of ICU acquired delirium requires personalized approach (2018, December 13) retrieved 25 April 2024 from <https://medicalxpress.com/news/2018-12-treatment-icu-delirium-requires-personalized.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.