

Alzheimer's drug prescribed 'off-label' for mild cognitive impairment could pose risk for some

February 24 2017



Credit: CC0 Public Domain

Donepezil, a medication that is approved to treat people with Alzheimer's disease, should not be prescribed for people with mild

cognitive impairment without a genetic test. UCLA School of Nursing researchers discovered that for people who carry a specific genetic variation—the K-variant of butyrylcholinesterase, or BChE-K—donepezil could accelerate cognitive decline.

Mild cognitive impairment is a transitional state between normal age-related changes in cognition and dementia. Because many people with the condition display symptoms similar to those caused by Alzheimer's disease, some physicians prescribe donepezil, which is marketed under the brand name Aricept and is the most-prescribed medication for Alzheimer's.

Donepezil was tested as a possible treatment for mild cognitive impairment in a large, federally funded study published in 2005, but it was not approved by the FDA. Still, doctors have often prescribed the drug "off-label"—meaning that it is not approved for that specific disorder—for their patients with [mild cognitive impairment](#).

From data collected during the 2005 trial, the researchers looked at the association between BChE-K and changes in cognitive function. Using two tests that measure [cognitive impairment](#), the Mini-Mental State Examination and the Clinical Dementia Rating Sum of Boxes, they found that people with the genetic variation who were treated with donepezil had greater changes in their scores than those who took placebos. They also found that those who took donepezil had a faster [cognitive decline](#) than those who took the placebo.

Physicians are increasingly using personalized medicine, including pharmacogenetics—the study of how genetics affect a person's response to a drug—to tailor their patients' care. The findings reinforce the importance of physicians discussing the possible benefits and risks of this treatment with their patients.

More information: Deleterious Effect of Butyrylcholinesterase K-Variant in Donepezil Treatment of Mild Cognitive Impairment. *Journal of Alzheimer's Disease*. www.j-alz.com/Vol56-1

Provided by University of California, Los Angeles

Citation: Alzheimer's drug prescribed 'off-label' for mild cognitive impairment could pose risk for some (2017, February 24) retrieved 23 November 2023 from <https://medicalxpress.com/news/2017-02-alzheimer-drug-off-label-mild-cognitive.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.