

New hope for treatment of Alzheimer's disease

July 15 2014

Judes Poirier, PhD, C.Q., from the Douglas Mental Health Institute and McGill University in Montréal (Canada) and his team have discovered that a relatively frequent genetic variant actually conveys significant protection against the common form of Alzheimer's disease and can delay the onset of the disease by as much as 4 years. This discovery opens new avenues for treatment against this devastating disease.

Dr. Poirier announced his findings as the annual Alzheimer's Association International Conference was taking place in Copenhagen. This large-scale study identified naturally occurring genetic variants that provide protection against the common form of Alzheimer's disease, with the goal of identifying specific biological processes amenable to pharmaceutical interventions.

"We found that specific genetic variants in a gene called HMG CoA reductase which normally regulates cholesterol production and mobilization in the brain can interfere with, and delay the onset of Alzheimer's disease by nearly 4 years. This is an exciting breakthrough in a field where successes have been scarce these past few years" says Dr. Poirier, whose previous research led to the discovery that a genetic variant was formally associated with the common form of Alzheimer's disease.

"These latest genetic results from Dr. Poirier's team are an important step forward in the understanding of Alzheimer's disease neurobiology, and also the use of genetics to identify an interesting new molecular

target that is amenable to therapeutic development" added Brigitte Kieffer, Scientific Director of the Research Centre of the Douglas Mental Health University Institute."

A different approach

Over the past two decades, research efforts around the globe have focused on identifying genetic and environmental factors responsible for causing or accelerating the progression of the common form of Alzheimer's disease. However, little was known about possible protective genetic factors that can delay or even prevent the disease onset in humans. It is well documented that a subset of older individuals who happen to be carriers of predisposing genetic factors for the common form of Alzheimer's manage to escape the [disease](#) and live long and productive lives without any memory problems until their 90's.

Provided by Douglas Mental Health University Institute

Citation: New hope for treatment of Alzheimer's disease (2014, July 15) retrieved 5 May 2024 from <https://medicalxpress.com/news/2014-07-treatment-alzheimer-disease.html>

<p>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.</p>
--