Translating whole-body cryotherapy into geriatric psychiatry—a proposed strategy for the prevention of Alzheimer's disease.

Misiak B, Kiejna A.

Source
Department of Psychiatry, Wroclaw Medical University, Pasteura 10, 50-367 Wroclaw, Poland. mblazej@interia.eu

Abstract
Alzheimer's disease (AD), which is the most common form of dementia, constitutes one of the leading causes of disability and mortality in aging societies. Currently recommended medications used in treating AD include cholinesterase inhibitors and the NMDA antagonist—memantine, but poorly counteract progression of the disease. According to current knowledge, the neuropathological process underlying the etiology of AD begins many years, if not decades, before the development of overt symptoms of dementia. Mild cognitive impairment (MCI) is regarded as the first detectable manifestation of cognitive decline. Nowadays, there is a general consensus that vascular alterations, oxidative stress and inflammatory response contribute to the development of AD. Following these mechanisms and tracing the anti-inflammatory and anti-oxidative effects of cryostimulation, we postulate that whole-body cryotherapy (WBCT) might be utilized as a means of preventing AD. WBCT is a relatively safe and cost-effective procedure, which is widely applied in various medical specialties. Thus, there is an urgent necessity to evaluate the long-term effectiveness of WBCT in the prevention of AD in patients with MCI and healthy individuals.

Copyright © 2012 Elsevier Ltd. All rights reserved.

PMID: 22541861 [PubMed - indexed for MEDLINE]