

Cerebral Small Vessels in Motor and Cognitive Decline

<https://neurodegenerationresearch.eu/survey/cerebral-small-vessels-in-motor-and-cognitive-decline/>

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Country

USA

Title of project or programme

Cerebral Small Vessels in Motor and Cognitive Decline

Source of funding information

NIH (NIA)

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Start date of award

01/08/2015

Total duration of award in years

1

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Microvascular Dysfunction, Cerebrum, Doppler Ultrasound, Impaired cognition, Cerebral small vessel disease

Research Abstract

DESCRIPTION (provided by applicant): Cognitive and motor impairments are the two most common causes of disability in older adults. These two problems can lead to disabling forms of

dementia and falls. Age-related cognitive and mobility impairments are clearly multifactorial, but with the rampant incidence of vascular disease in an aging population we cannot underestimate the role of cerebrovascular disease in age-related mobility disability and cognitive decline. Increasing evidence from epidemiological and clinico-pathological studies has established a strong link between vascular disease, particularly cerebral small vessel disease and the age-related clinical outcomes of cognitive and mobility impairment. However, our current research and knowledge is based on surrogate radiographic measure of small vessel disease which are mostly irreversible. The overall goal of this study is to identify vascular measures of cerebral small vessels which precede the onset of cognitive and motor decline and are predictive of clinical and radiographic outcomes in small vessel disease. Such measures would allow us to identify individuals in the pre-clinical state when our prevention and therapeutic interventions could have a higher impact. Moreover, these measures can also be used in future clinical trials to monitor disease progression and to evaluate new therapies.

Lay Summary

PUBLIC HEALTH RELEVANCE: This study investigates cerebral vascular mechanisms leading to cognitive and mobility impairment in older adults. Cognitive and mobility impairments are a significant public health problem among elderly people. Cerebrovascular disease is a major contributor to these clinical outcomes. A better understanding of vascular mechanisms which precede cognitive and mobility impairment will advance our knowledge of this process and help us identify more effective preventions and treatments.

Further information available at:

Types:

Investments > €500k

Member States:

United States of America

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

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