

How fast you walk and your grip in middle age may predict dementia, stroke risk

February 15 2012

Simple tests such as walking speed and hand grip strength may help doctors determine how likely it is a middle-aged person will develop dementia or stroke. That's according to new research that was released today and will be presented at the American Academy of Neurology's 64th Annual Meeting in New Orleans April 21 to April 28, 2012.

"These are basic office tests which can provide insight into risk of dementia and stroke and can be easily performed by a neurologist or general practitioner," said Erica C. Camargo, MD, MSc, PhD, with Boston Medical Center.

More than 2,400 men and women with an average age of 62 underwent tests for walking speed, hand grip strength and cognitive function. [Brain scans](#) were also performed. During the follow-up period of up to 11 years, 34 people developed dementia and 70 people had a stroke.

The study found people with a slower walking speed in middle age were one-and-a-half times more likely to develop dementia compared to people with faster walking speed. Stronger hand grip strength was associated with a 42 percent lower risk of stroke or [transient ischemic attack](#) (TIA) in people over age 65 compared to those with weaker hand grip strength. This was not the case, however, for people in the study under age 65.

"While frailty and lower physical performance in elderly people have been associated with an increased risk of dementia, we weren't sure until

now how it impacted people of middle age," said Camargo.

Researchers also found that slower [walking speed](#) was associated with lower total cerebral brain volume and poorer performance on memory, language and decision-making tests. Stronger hand [grip strength](#) was associated with larger total cerebral [brain volume](#) as well as better performance on cognitive tests asking people to identify similarities among objects. "Further research is needed to understand why this is happening and whether preclinical disease could cause slow walking and decreased strength," said Camargo.

Provided by American Academy of Neurology

Citation: How fast you walk and your grip in middle age may predict dementia, stroke risk (2012, February 15) retrieved 2 May 2024 from <https://medicalxpress.com/news/2012-02-fast-middle-age-dementia.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>
--