

# Diabetes drug could influence brain activity in Alzheimer's

28 April 2016

Researchers in Denmark have released findings from a small clinical trial of the diabetes drug liraglutide in people living with Alzheimer's disease.

The [pilot study](#) published today in the journal *Frontiers in Aging Neuroscience* suggests that treatment with liraglutide could help to limit the loss of [brain activity](#) that can be seen in Alzheimer's disease, but did not show benefits against the build-up of the Alzheimer's [protein amyloid](#) or an effect on memory and thinking over the trial period.

The 26-week trial followed 38 people with Alzheimer's disease who received either liraglutide or a [placebo treatment](#). Participants had brain scans before and after treatment to measure levels of the [amyloid protein](#) as well as scans measuring [glucose metabolism](#) – a marker of brain activity that normally declines as Alzheimer's progresses. The volunteers also had memory tests before and after the trial.

The results from the amyloid brain scans showed that levels of the protein increased in the brain in people taking the drug as well as the placebo. The researchers also report that the drug did not show measurable benefits on memory and thinking test performance compared to the placebo. Despite this, those taking liraglutide showed a less marked decline in the use of glucose in the brain suggesting that brain activity was maintained to a higher level in those taking the drug.

Dr Simon Ridley, Director of Research at Alzheimer's Research UK, said:

"There is a well-established link between diabetes and Alzheimer's disease and previous research in mice indicated that liraglutide could hold potential in limiting the damaging effects of Alzheimer's in the brain. This small clinical trial of liraglutide in people living with Alzheimer's, shows some benefit of the drug on brain activity but does not show an

impact on memory or on levels of a hallmark Alzheimer's protein in the brain. The real test of such a drug being used to treat Alzheimer's will be whether larger trials are able to show a measurable benefit to a person's symptoms and quality of life.

"Current treatments for Alzheimer's are limited and with half a million people living with the disease in the UK, we urgently need to find treatments that can stop or slow the damage it causes in the brain. There is a larger trial of liraglutide currently underway here in the UK and we hope that study will shed more light on the potential of this drug as a treatment for Alzheimer's."

**More information:** A UK study investigating liraglutide in people with mild Alzheimer's disease is currently recruiting for participants. To find out more about this study and how to take part in dementia research contact Join Dementia Research on [www.joindementiaresearch.nihr.ac.uk](http://www.joindementiaresearch.nihr.ac.uk) or call Alzheimer's Research UK on 0300 111 5 111

Provided by Alzheimer's Research UK

APA citation: Diabetes drug could influence brain activity in Alzheimer's (2016, April 28) retrieved 24 June 2022 from <https://medicalxpress.com/news/2016-04-diabetes-drug-brain-alzheimer.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.*