Hypertension, hypoperfusion and neurodegeneration in Alzheimer’s disease

https://neurodegenerationresearch.eu/survey/hypertension-hypoperfusion-and-neurodegeneration-in-alzheimers-disease/

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Country

United Kingdom

Title of project or programme

Hypertension, hypoperfusion and neurodegeneration in Alzheimer's disease

Source of funding information

Alzheimer's Research UK

Total sum awarded (Euro)

€ 526,443

Start date of award

01/01/2016

Total duration of award in years

3.3

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords
Research Abstract

Hypertension (elevated blood pressure) promotes the accumulation of amyloid-? within the brain and may increase the risk of Alzheimer’s. In keeping with recent findings in elderly people scanned for brain amyloid, in post-mortem brains from Alzheimer’s patients we found more amyloid-? in those with than without previous hypertension. We want to investigate in more detail why amyloid-? accumulates within the brain in hypertension, and to determine whether

the hypertension contributes to Alzheimer’s-type degeneration of nerve cells. Possible explanations for a link between hypertension and amyloid-? include effects of hypertension on enzymes responsible for the production and removal of amyloid-?, and effects on blood vessels and blood flow within the brain. With previous ARUK support, we have developed ways of analysing these enzymes and effects, through measuring the activity of enzymes that produce and remove amyloid-?, and measuring markers of blood flow through the brain, and severity of damage to blood vessels. We will use these methods to study two large, well-characterised sets of post-mortem brains–some from, and others not from, people who had hypertension. The research will clarify the mechanisms that relate hypertension, reduced blood flow, amyloid-? and Alzheimer’s and may identify processes that can be targeted for treatment.

Lay Summary
Further information available at:

Types:
Investments > €500k

Member States:
United Kingdom

Diseases:
Alzheimer's disease & other dementias

Years:
2016

Database Categories:
N/A

Database Tags:
N/A