

# Hypertension in Dementia – Feasibility Study

<https://www.neurodegenerationresearch.eu/survey/hypertension-in-dementia-feasibility-study/>

## **Principal Investigators**

Dr Veronika van der Wardt

## **Institution**

Nottingham University Hospitals NHS Trust

## **Contact information of lead PI**

### **Country**

United Kingdom

## **Title of project or programme**

Hypertension in Dementia - Feasibility Study

## **Source of funding information**

RfPB Competition 20 - East Midlands

## **Total sum awarded (Euro)**

€ 461,751

## **Start date of award**

01/04/2014

## **Total duration of award in years**

2

## **Keywords**

**Research Abstract**

Background

While research has shown that antihypertensive treatment reduces the risk of stroke, myocardial infarction and other cardiovascular events [1-4], this has never been investigated in people with dementia. The risk for harmful effects of antihypertensive treatment, however, is higher in people with dementia compared to those without dementia. For example, some antihypertensive treatments increase the risk of falls and syncope. Although the increased risk has been established for all older people [5,6] the risk is even higher for those with dementia [7]. Furthermore, all antihypertensive medication will contribute to polypharmacy, which is already more excessive in people with dementia than in those without [8], and which increases the risk of multiple negative health outcomes and mortality [9].

Research demonstrated that antihypertensive medication can be withdrawn successfully in 20% to 100% of older people without dementia [10-12]. In those, the risk of negative health events and mortality is lower than for those continuing antihypertensive medication [13]. Consequently, for people with dementia, the balance of benefits and harms of antihypertensive treatment is likely to differ from those without dementia and may not be favourable. Withdrawal of antihypertensive therapy may be feasible, safe and might reduce adverse drug effects.

## Aims

Ahead of a research project to investigate the balance between benefits and harms of antihypertensive treatment in people with dementia, the proposed project aims to investigate the feasibility of such a study. Our research questions therefore are: 1) can antihypertensive treatment be withdrawn successfully in people with dementia using antihypertensives? 2) What are response, exclusion and drop-out rates? 3) What are the issues regarding consent from consultees?

## Plan of investigation

We propose a feasibility study evaluating a withdrawal programme of antihypertensive treatment in people with dementia to answer these questions. The study will be carried out by the Universities of Nottingham and Leicester. Recruitment will take place through GP practices selecting people with moderate and severe dementia using antihypertensive medication. After consent, a research nurse will assess blood pressure levels to ensure they are within a normal range (following NICE guidelines). If blood pressure levels are outside the normal range, the GP will be informed and the patient excluded. Following baseline assessments (cognition, depression, independence, quality of life, behavioural problems, kidney function), participants will be entered into a withdrawal programme and monitored weekly. In case of hypertension recurring, the GP will be informed immediately to recommence antihypertensive treatment. Falls, syncope, healthcare worker visits, hospital and ED admissions as well as cardiovascular events will be recorded during BP monitoring visits. Follow-up assessments will take place after 6 months. Alongside this project, a qualitative study (thematic analysis) will investigate consultees' issues regarding consent.

## Potential benefits to patients and the NHS

The project will have immediate benefits for those participating as well as short and long term benefits for patients and research.

All participants will benefit from regular (weekly) blood pressure monitoring. Blood tests at baseline and follow up provide additional health care. For those who can be successfully withdrawn from the antihypertensive treatment, this will reduce the risk for negative health outcomes.

Benefits for patients and NHS after conclusion of the project will include an estimate of the number of people who are inappropriately on antihypertensive treatment and a clarification of issues around consenting for people with dementia. Both results can immediately inform health care policies and research.

In addition, results will inform the preparation of a larger trial to investigate the balance of benefits and harms of antihypertensive treatment in people with dementia and research into withdrawal of antihypertensive treatment.

### **Further information available at:**

**Types:**

Investments < €500k

**Member States:**

United Kingdom

**Diseases:**

N/A

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

N/A