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AFFECT WALES: A comparison between an optimised treatment protocol and standard care for the treatment of Vascular Dementia.

Submission date
08/03/2016

Recruitment status
No longer recruiting

Registration date
11/03/2016

Overall study status
Stopped

Last Edited
12/02/2020

Condition category
Circulatory System

[X] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
Dementia is increasingly common in the aging population, affecting around 35.6 million people worldwide. People with dementia have difficulties with mental processes such as memory, language, reasoning and identifying people and objects, which become progressively worst over time. Vascular dementia (VaD) is the second most common type of dementia (after Alzheimer's disease), and is caused by a reduced flow of blood to the brain because of diseased blood vessels. There are several types of VaD, the most common being subcortical ischemic vascular dementia (SIVD). SVID happens when the tiny blood vessels deep in the brain become blocked due to the build-up of a fatty substance called plaque on the vessel walls. Currently there are no approved treatments or on-going studies looking at the treatment of SIVD. There is a potential opportunity to improve treatment for people with SIVD by lowering their blood pressure to a slightly lower level than is usually achieved with standard treatment. This approach has been successful in reducing the risk of memory problems in people who have had a stroke, and may also have benefits for people with SIVD. The aim of this study is to find out whether a more rigorous approach to reducing blood pressure can effectively reduce blood pressure in people with SIVD and will begin to look at whether there are other benefits in terms of memory and changes on a brain scan.

Who can participate?
Adults aged 50 and over who have SIVD are live in Wales.

What does the study involve?
Participants are randomly allocated to one of two groups. Those in the first group receive intensive treatment to lower their blood pressure, with a target of less than 125mmHg systolic pressure (the highest pressure when the heart beats and pushes the blood round the body). This is done using a formula that takes into account the current guidelines for treating people with stroke, high blood pressure and type 2 diabetes, and prioritizing use of the drug amlodipine (a drug which relaxes blood vessels to improve blood flow) where appropriate. Those in the second group receive blood pressure management which reflects the current guidelines, aiming for a less than 140mmHg systolic pressure. Participants in both groups complete a number of

questionnaires at the start of the study and then after 13, 26 and 52 weeks in order to test their cognitive function (thinking, memory and understanding), executive function (mental skills that help a person to get things done) and quality of life. Participants also have an MRI (brain scan) at the start of the study and at 52 weeks in order to find out if the damage to their brain caused by the SIVD has gotten worse.

What are the possible benefits and risks of participating?
Participants may benefit from an improvement of their SIVD symptoms as a result of better controlling their blood pressure. There is a small risk that the drugs used in this study might react with other medications a patient is taking, including over the counter medications and herbal products. Participants medications are therefore monitored closely to avoid this. Participants in this study are also advised not to consume grapefruit, as it can interact with some medications.

Where is the study run from?
King's College London (UK)

When is the study starting and how long is it expected to run for?
February 2016 to August 2018

Who is funding the study?
The Waterloo Foundation (UK)

Who is the main contact?
1. Professor Clive Ballard (scientific)
2. Miss Olga Borejko (public)

Contact information

Type(s)
Scientific

Contact name
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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
A randomised controlled trial of an optimized protocol for blood pressure management (prioritizing calcium channel blockade with Amlodipine) for the treatment of subcortical ischaemic vascular dementia (AFFECT WALES)

Acronym
AFFECT WALES

Study objectives
Primary hypothesis:
An optimized treatment protocol to reduce blood pressure, which prioritizes the use of amlodipine based on NICE guidelines will reduce blood pressure in people with SIVD in comparison to usual care.

Secondary hypothesis:
An optimized treatment protocol to reduce blood pressure, which prioritizes the use of amlodipine based on NICE guidelines will result in benefits to the treatment of SIVD with respect to structural MRI imaging, cognition, neuropsychiatric symptoms and activities of daily living in comparison to usual treatment over 12 months.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Study design
Single-blind randomised controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Subcortical ischaemic vascular dementia

Interventions
After informed consent and once all eligibility criteria have been confirmed, patients will be randomised to the study intervention or usual treatment.

Optimised treatment arm: Participants will receive intensive blood pressure treatment following the trial algorithm which takes account of NICE guidelines relating to stroke, hypertension and type 2 diabetes and prioritises Amlodipine (when indicated) with a target systolic blood pressure of <125mmHg. The algorithm is only a guide to the treating doctor and doctors have full autonomy to choose different treatment approaches based on local policy, individual practice and patient specific characteristics to ensure that the best clinical treatment is given.

Standard care treatment arm: Participants will receive blood pressure management that reflects current community based practice based on national/international guidelines with a target systolic blood pressure of <140 mmHg.

be asked to attend five visits over 12 months plus two MRI assessments. Visit 1 (screening), visit 2 (baseline: within four weeks of visit one), visit 3 at week 13, visit 4 at week 26 and visit five at week 52. There will also be an additional safety check over the telephone four weeks after visit two. During these visits study staff will perform cognitive assessments, take a full medical history, ECG, blood tests and vital signs and complete informant and patient questionnaires to assess functional abilities and quality of life. At visit 1 consent and demographics will be taken from the participant and informant along with a full clinical/ medical history, medical/ neurological examination, details of previous and current medications, blood tests, ECG and MRI. At visits 2, 3, 4 and 5 the VADAS-cog, CGIC, sMMSE, Trail making B, DAD, GHQ12, EQ-5D, DEMQOL and NPI scales will be administered along with a medical/ neurological examination, blood tests, vital signs and ECG (if clinically indicated). MRI assessments will be completed prior to visit 2 (baseline) to confirm patient eligibility and at visit 5 (52 weeks) as part of the final outcome assessments.

Intervention Type
Other

Primary outcome(s)
Systolic and diastolic blood pressure is measured using an electronic or manual sphygmomanometer at baseline, 13, 26 and 52 weeks

Key secondary outcome(s))
1. Cognitive function is measured using the Vascular Dementia Assessment Scale cognitive subscale (VADAS-cog) at baseline, 13, 26 and 52 weeks
2. Cognitive function measured with the Standardized Mini-Mental State Examination (SMMSE) at baseline, 13, 26 and 52 weeks
3. Executive function is measured using the Trail Making test B at baseline, 13, 26 and 52 weeks
4. Clinical outcome is measured using the Clinical Global Impressions (CGI) Scale, as rated by a clinician blind to treatment allocation at baseline, 13, 26 and 52 weeks
5. Lesion accrual is measured using MRI at baseline and 52 weeks
6. Health-related quality of life is measured with the DEMQOL-Proxy at baseline, 13, 26 and 52 weeks
7. Activities of daily living are measured using the Disability Assessment for dementia (DAD)

Scale at baseline, 13, 26 and 52 weeks
8. Non-cognitive dementia symptoms are measured using the Neuropsychiatric Inventory (NPI) at baseline, 13, 26 and 52 weeks
9. Change in care-giver burden is measured using the GHQ-12, and care-giver health-related quality of life measured with the EQ-5D-5L at baseline, 13, 26 and 52 weeks

Completion date
01/08/2018

Reason abandoned (if study stopped)
Rejected at a REC meeting

Eligibility

Key inclusion criteria
1. Dementia syndrome according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)
2. Evidence of one or more clinical features in support of SIVD such as executive dysfunction, mood or gait disturbance or focal neurological signs (Erkinjuntti 2000)
3. Multiple lacunae (>2) or diffuse lesions reaching a mean score of 2-3 across brain regions identified on baseline MRI scan
4. Standardised Mini -Mental State Examination (sMMSE) score between 15 and 28 (inclusive)
5. Aged 50 and over
6. Patient has mental capacity and is capable of giving consent
7. Patient has resident family or professional carer or is visited at least twice a week by carer
8. Fluency in English is essential as study requires questionnaires to be completed
9. Likely to be able to participate in all scheduled evaluations and complete all required tests
10. Provision of appropriate consent
11. Presence of an informant, aged 18 years or over who is willing to participate in the study

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Senior

Lower age limit
18 years

Sex
All

Key exclusion criteria
1. Severe, unstable or poorly controlled medical conditions apparent from physical examination or clinical history
2. Moderate/severe heart disease or severe hepatic disease
3. Significant renal insufficiency; estimated glomerular filtration rate (eGFR) <30ml/min

4. Systolic Blood pressure is less than 110mmHg
5. Cerebrovascular event within the last six months
6. Myocardial infarction within the last three months
7. Already taking any calcium channel blocker
8. Treatment with immunosuppressive medications (e.g. systemic corticosteroids) within the last 90 days
9. Other clinically significant abnormality on physical, neurological, laboratory, examination that could compromise the study or be significantly detrimental to the patient

Date of first enrolment
02/05/2016

Date of final enrolment
01/08/2017

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
King's College London
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Sponsor information

Organisation
King's College London

ROR
https://ror.org/0220mzb33

Funder(s)

Funder type
Charity

Funder Name
The Waterloo Foundation

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes