HYVET 2: treatment of white coat hypertension in the very elderly

Submission date 09/07/2018	Recruitment status No longer recruiting	[X] Prospectively registered		
		[_] Protocol		
Registration date	Overall study status Stopped	[] Statistical analysis plan		
12/07/2018		[X] Results		
Last Edited 12/03/2021	Condition category Circulatory System	Individual participant data		
		[] Record updated in last year		

Plain English summary of protocol

Background and study aims

White coat hypertension is when a patient has raised blood pressure when they are in a clinic setting but normal blood pressure at home. At present, white coat hypertension isn't treated, but previous research has suggested that there might be some benefit to treating it in relation to conditions affecting the heart and blood vessels. This study is looking at whether it is possible to run a trial to treat white coat hypertension in older patients with blood pressure lowering drugs.

Who can participate? Patients aged 75 and over with white coat hypertension

What does the study involve?

Participants are randomly allocated to blood pressure lowering treatment for 12 months or no treatment. There are required visits to the GP every 2 months throughout the 12-month period and participants are asked to keep a diary of any ailments that they experience during the study.

What are the possible benefits and risks of participating? There are no specific benefits to the participant. However, research delivers wider benefits to society and this study may help to improve care for others with a similar condition in the future. Information gathered in this trial will help develop the design and delivery of the full trial.

Where is the study run from? Brighton & Sussex Clinical Trials Unit (UK), with trial sites throughout England

When is the study starting and how long is it expected to run for? April 2018 to April 2021

Who is funding the study? Dunhill Medical Trust (UK)

Who is the main contact? Dr Nicky Perry, bsctu@bsms.ac.uk

Contact information

Type(s) Scientific

Contact name Dr Nicky Perry

Contact details

Brighton & Sussex Clinical Trials Unit Room 204 Bevendean House University of Brighton Falmer United Kingdom BN1 9PH +44 (0)1273 641469 bsctu@bsms.ac.uk

Additional identifiers

EudraCT/CTIS number 2017-004004-22

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 37147

Study information

Scientific Title

A multi-centred, open label, randomised study assessing the cardiovascular outcomes following treatment of white coat hypertension with established anti-hypertensive drugs versus standard of care in the very elderly - feasibility study

Acronym HYVET 2

Study objectives

The HYVET 2 study is looking at whether it is possible to treat White Coat Hypertension in older patients with blood pressure lowering drugs. White Coat Hypertension is a raised blood pressure when you are in a clinic setting however, your blood pressure at home is normal. At present, White Coat Hypertension isn't treated, however, previous research has suggested that there might be some benefit to treating White Coat Hypertension in relation to conditions affecting the heart and blood vessels. We want to investigate this further. This is a multi-centre, open-label study assessing the feasibility of conducting a randomised controlled trial to treat white coat hypertension in the very elderly.

Ethics approval required

Old ethics approval format

Ethics approval(s) London – Westminster REC, 03/04/2018, ref: 18/LO/0104

Study design Randomised; Interventional; Design type: Treatment, Drug

Primary study design Interventional

Secondary study design Randomised controlled trial

Study setting(s) GP practice

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

White coat hypertension

Interventions

It will entail a 1:1 randomisation of patients to a treatment arm with established antihypertensive drugs (indapamide and perindopril) and control arm (no treatment) which is current standard of care. This design will gather preliminary information on the intervention and the feasibility of conducting a full-scale randomised controlled trial. Recruitment will take place in GP surgeries.

Once potential participants have been identified through database search and mailouts or opportunistic recruitment, the participant will be invited in to consent for the trial and have a clinic blood pressure measurement. Within the next 2 weeks (+/- 7 days) the participant will return to the GP surgery for cognitive function assessments, review of past & current medical history, review of concomitant medications, another clinic blood pressure measurement, 24 hours ABPM (Ambulatory Blood Pressure Monitoring) and HBPM (Home Blood Pressure Monitoring), routine blood tests (biochemistry and haematology) and a 12 lead ECG. This will constitute the screening visits (visits 1 and 2).

Following visits 1 and 2, at Baseline (Visit 3) which is a further two weeks later +/-7 days) the particpant will be randomised to either the treatment arm or no treatment (current standard of care). An NHS prescription will then be written and given to the participant. Frailty assessments,

an assessment of concomitant medications, adverse events, clinic blood pressure and other routine baseline data will be performed.

At Visits 4 and 5 (Weeks 12, 20 +/-7 days) the participant will be expected to return to the GP surgery for a clinic blood pressure measurement, assessment of adverse events and concomitant medications, HBPM, another prescription if required and a pill count of unused tablets or empty packaging.

At Visit 6 (Week 28 +/- 7 days) the participant will be required to return to the GP surgery for review of concomitant medications and adverse events, clinic blood pressure measurement, ABPM, HBPM, routine bloods (biochemistry and haematology), 12 lead ECG, prescription if required and an adherence check (pill count).

At Visits 7 and 8 (Weeks 36 and 44 +/- 7 days) the participant will be expected to come in to the GP surgery for a clinic blood pressure measurement and an assessment of concomitant medications and adverse events.

At Visit 9 (Week 52 +/- 7 days), the participant will be required to return to the GP surgery for cognitive function assessment and frailty assessments, review of concomitant medications and adverse events, clinic blood pressure measurement, HBPM, routine bloods (biochemistry and haematology), 12 lead ECG and an adherence check (pill count).

At Visit 10 (Week 60 +/- 7 days) the participant will be expected to come in to the GP surgery for a clinic blood pressure measurement, an assessment of concomitant medications and adverse events. In addition, 10 participants will be interviewed regarding their experience by members of the Patient and Public Involvement group.

Extra visits might be scheduled by the principal investigator, as appropriate, based on clinical requirement.

Follow up information on all participants will be sought after 2 years from the end of trial participation by reviewing the GP records to determine whether the participant is alive or deceased and whether they have experienced any cardiovascular outcomes.

Intervention Type

Drug

Phase Not Applicable

Drug/device/biological/vaccine name(s)

Indapamide, perindopril

Primary outcome measure

HYVET 2 is a feasibility study which will focus on the following outcomes:

1. The estimated proportion of eligible patients that can be recruited from initial screening by reviewing Screening Logs to determine the proportion of screened patients eligible for recruitment on an ongoing basis

 The effectiveness of different methods of identifying/recruiting patients - search and mail out, opportunistic recruitment and posters/adverts are included in the protocol design
 The willingness of GPs to recruit and randomise patients, assessed by getting feedback from Primary Care team and GPs directly

4. The willingness of patients to be randomised, assessed by reviewing Screening Logs to determine the proportion of screened patients eligible for recruitment on an ongoing basis 5. The recruitment rate over the trial duration and the proportion of eligible patients that provide consent on an ongoing basis

6. Adherence to the treatment protocol by performing pill counts at each visit

7. The proportion withdrawing and reason for withdrawal, assessed on an ongoing basis 8. The opportunities for PPI (patient and public involvement) in the research design and its subsequent conduct and dissemination. A lay member will sit on the TSC and a PPI panel will review patient facing documents

9. Incidence of cardiovascular events by assessing the composition of cardiovascular events on an ongoing basis

10. Ambulatory and home blood pressure (mmHg) measured on an ongoing basis

Secondary outcome measures

Overall study start date 23/04/2018

Completion date 22/04/2021

Reason abandoned (if study stopped)

Participant recruitment issue

Eligibility

Key inclusion criteria

- 1. Patients ≥75 years of age
- 2. Clinic sitting systolic BP ≥150 mmHg but <200 mmHg and diastolic BP <110 mmHg

3. Established diagnosis of white coat hypertension - confirmed if the mean ambulatory day time average systolic BP is <135 mmHg and diastolic BP is <85 mmHg (from at least 14 measurements) or for HBPM from BP readings twice a day for at least 5 days (ideally 7 days) at baseline

4. Not taken antihypertensive drug therapy within the last 6 months

- 5. Capacity to consent
- 6. Provision of documented informed consent

7. Ability to comply with the protocol and additional study visits and assessments

Participant type(s)

Patient

Age group

Senior

Sex Both

Target number of participants

Planned Sample Size: 100; UK Sample Size: 100

Key exclusion criteria

1. Contraindication to the use of indapamide MR and perindopril in accordance with the summary of product characteristics

2. Regular non-steroidal anti-inflammatory drug (NSAID) use. Regular use being defined by the local GP with consideration to cardiovascular risk and blood pressure

3. Hypertensive emergency

4. Secondary hypertension

5. Postural hypotension (postural drop in systolic BP> = 20 mmHg or postural symptoms at screening)

6. Any stroke or myocardial infarction in the previous 6 months

- 7. Heart failure requiring treatment with drugs having an antihypertensive effect
- 8. Previous documented evidence of gout
- 9. eGFR less than 30ml/min
- 10. Montreal cognitive assessment score (MoCA) < 22

11. Life expectancy < 1 year due to malignancy or chronic disease

Date of first enrolment

16/07/2018

Date of final enrolment 30/04/2020

Locations

Countries of recruitment England

United Kingdom

Study participating centre Brockwood Medical Practice Brockham Surgery Tanners Meadow Brockham United Kingdom RH3 7NJ

Study participating centre Cossington House Surgery 51 Cossington Road Canterbury United Kingdom CT1 3HX Study participating centre Furnace Green Surgery 50 The Glade Furnace Green Crawley United Kingdom RH10 6JN

Study participating centre Henfield Medical Centre Deer Park Henfield United Kingdom BN5 9JQ

Study participating centre Mid Sussex Healthcare Hurstpierpoint Health Centre Mid Sussex Health Care Trinity Road Hurstpierpoint United Kingdom BN6 9UQ

Study participating centre Newton Place Surgery Newton Road Faversham United Kingdom ME13 8FH

Study participating centre Park Road Surgery 143 Park Road Camberley United Kingdom GU15 2NN

Study participating centre

Stone Cross Surgery

Mimram Road Stone Cross United Kingdom BN24 5DZ

Study participating centre Trinity Medical Centre 1 Goldstone Villas

Hove United Kingdom BN3 3AT

GU2 8YB

BB9 5RZ

Study participating centre Woodbridge Hill Surgery 1 Deerbarn Road Guildford United Kingdom

Study participating centre Cleveleys Group Practice Kelso Ave Blackpool United Kingdom FY5 3LF

Study participating centre Pendle View Medical Centre 47 Arthur St Brierfield Nelson United Kingdom

Study participating centre Mendip Vale Medical Practice 155 Mendip Rd Yatton

Bristol United Kingdom BS49 4ER

BS37 4AX

Study participating centre West Walk Surgery Yate West Gate Centre 21 West Walk Yate Bristol United Kingdom

Study participating centre The ColTe Partnership 76 Ambrose Ave Colchester United Kingdom CO3 4LN

Study participating centre The Bartholomew Medical Group Goole Health Centre Woodland Ave Goole United Kingdom DN14 6RU

Study participating centre Gilberdyke Health Centre Thornton Dam Lane

Brough United Kingdom HU15 2UL

Study participating centre

Stockwell Road Surgery 21 Stockwell Road Knaresborough United Kingdom HG5 0NY **Study participating centre The Ridings Medical Group - Brough Surgery** 4 Centurion Way Brough United Kingdom HU15 1AY

Study participating centre Diadem Medical Practice 2 Diadem Grove Hull United Kingdom HU9 4AL

Sponsor information

Organisation University of Sussex

Sponsor details

c/o Dr Antony Walsh Research Governance Officer Research and Enterprise Services Falmer House Brighton England United Kingdom BN1 9QF +44 (0)1273 872748 Internal Extension: 2748 researchsponsorship@sussex.ac.uk

Sponsor type

University/education

ROR

https://ror.org/00ayhx656

Funder(s)

Funder type Charity **Funder Name** Dunhill Medical Trust; Grant Codes: R541/0217

Alternative Name(s) The Dunhill Medical Trust, DMT

Funding Body Type Private sector organisation

Funding Body Subtype Other non-profit organizations

Location United Kingdom

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal.

Intention to publish date

22/04/2022

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date. The grant requires the data to be made available as widely as possible to maximise potential benefits; however, the plan hasn't been determined.

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs					
Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results		16/02/2020	17/02/2021	No	No
<u>HRA research summary</u>			26/07/2023	No	No