ISRCTN10134725 https://doi.org/10.1186/ISRCTN10134725

Helicobacter Eradication Aspirin Trial (HEAT)

Submission date 19/12/2011	**Recruitment status** No longer recruiting	[X] Prospectively registered [X] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 28/12/2011	**Overall study status** Completed	
Last Edited 13/06/2023	**Condition category** Digestive System	

Plain English summary of protocol

Background and study aims
Aspirin is a medicine that reduces the risk of clots forming in your blood. Aspirin use is widespread and increasing in elderly patients. The main side effect is gastrointestinal (digestive tract) bleeding, the incidence of which is rising, probably because of increased aspirin use. We think that the bacterium Helicobacter pylori causes stomach ulcers and aspirin, by thinning the blood, makes the ulcers bleed. If the bacterium is eradicated the patient will not get an ulcer and therefore there is no increased bleeding risk with aspirin. The aim of this study is to find out whether a one-week course of H. pylori eradication will reduce the rate of hospitalisation due to ulcer bleeding.

Who can participate?
Patients over 60 using aspirin daily who are infected with H. pylori.

What does the study involve?
Participants are randomly allocated to either treatment to eradicate H. pylori or placebo (dummy tablets). There will be no follow-up visits for 90% of patients. Instead we will use GP electronic databases to identify hospital admissions for ulcer bleeding. A random sample of participants will be breath tested at the end of the study to ensure that we are achieving similar H. pylori eradication rates to those achieved in our previous study.

What are the possible benefits and risks of participating?
A positive result would increase patient safety, reduce hospitalisations for gastrointestinal bleeding, reduce premature death, decrease medical costs and expand the number of patients for whom aspirin is beneficial.

Where is the study run from?
Nottingham Digestive Diseases Centre (UK)

When is the study starting and how long is it expected to run for?
March 2012 to December 2021 (updated 14/01/2021, previously: April 2017)

Who is funding the study?
NIHR Health Technology Assessment Programme - HTA (UK)

Who is the main contact?
Jennifer Dumbleton
jennifer.dumbleton@nottingham.ac.uk

Contact information

Type(s)
Scientific

Contact name
Prof Chris Hawkey

Contact details
Nottingham Digestive Diseases Centre
University Hospital
Nottingham
United Kingdom
NG7 2UH

Type(s)
Scientific

Contact name
Ms Jennifer Dumbleton

ORCID ID
http://orcid.org/0000-0001-9099-5555

Contact details
Nottingham Digestive Diseases Centre
University Hospital
Nottingham
United Kingdom
NG7 2UH

Additional identifiers

EudraCT/CTIS number
2011-003425-96

IRAS number

ClinicalTrials.gov number
NCT01506986

Secondary identifying numbers
11091

Study information

Scientific Title
Helicobacter eradication to prevent ulcer bleeding in aspirin users: a large simple randomised controlled trial

Acronym
HEAT

Study objectives
Current hypothesis as of 25/05/2016:
A one week course of Helicobacter pylori (H. pylori) eradication in patients using aspirin (less than 325mg) daily will reduce the incidence of subsequent adjudicated peptic ulcer bleeding which results in hospitalisation.

Previous hypothesis:
A one week course of Helicobacter pylori (H. pylori) eradication in patients using aspirin (325mg) daily will reduce the incidence of subsequent adjudicated peptic ulcer bleeding which results in hospitalisation.

More details can be found at: http://www.nets.nihr.ac.uk/projects/hta/095552
Protocol can be found at: http://www.nets.nihr.ac.uk/__data/assets/pdf_file/0006/54555/PRO-09-55-52.pdf

Ethics approval required
Old ethics approval format

Ethics approval(s)
East Midlands Research Ethics Committee, 08/12/2011, ref: 11/EM/0434

Study design
Double-blind placebo-controlled randomised multi-centre study

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 below to request a patient information sheet

Health condition(s) or problem(s) studied
Patients using aspirin less than 325mg daily

Interventions

Active treatment will consist of seven days of lansoprazole 30mg, clarithromycin 500mg and metronidazole 400mg all given twice daily. This is one of the authorised recommended regimens for H. pylori eradication in adults. The control group will receive placebos to the same regimen:

Lansoprazole (CAS: 103577-45-3); 30mg capsules (generic)
Clarithromycin (CAS: 81103-11-9); 500mg tablets (generic)
Metronidazole (CAS: 99616-64-5); 400mg tablets (generic)

Current interventions as of 25/05/2016:
The trial will continue until 87 adjudicated events have occurred, which would occur after a mean 2.5 patient years of follow-up, if trial assumptions are correct.

Previous interventions:
The trial will continue until 96 adjudicated events have occurred, which would occur after a mean 2.5 patient years of follow-up, if trial assumptions are correct.

Intervention Type
Drug

Phase
Not Applicable

Drug/device/biological/vaccine name(s)
Clarithromycin, lansoprazole, metronidazole

Primary outcome measure
The rate of hospitalisation due to peptic ulcer bleeding in patients who enter the randomised study (only the first event per patient will be analysed), adjudicated by a blinded committee as definite or probable. The committee will use definitions validated in the TARGET study.

Secondary outcome measures
1. Other causes of GI bleeding (adjudicated); these are predicted not to be affected by H. pylori eradication and will act as a specificity control
2. Cardiovascular outcomes (APTC endpoint, MI and stroke, unadjudicated); these are predicted not to be affected
3. The incidence of detected uncomplicated ulcers
4. Ulcer site (Duodenal Ulcer vs. Gastric Ulcer)
5. GP-recorded and patient-reported dyspepsia
6. Need for PPI prescription or other antiulcer/dyspepsia medication

Overall study start date
01/03/2012

Completion date
31/12/2021

Eligibility

Key inclusion criteria

1. Males and females more than 60 years of age at the date of screening
2. Subjects who are taking aspirin less than 325mg daily and who have had 4 or more 28 day prescriptions in the last year
3. Subjects who are concurrently using other anti-platelet agents are allowed to enter the study
4. Subjects who are willing and able to undergo a breath test for H. pylori, including fasting for 6 hours, and whose result is unequivocally positive (results of breath test will be determined post-screening)
5. Subjects who are willing to give permission for their paper and electronic medical records to be accessed and abstracted by trial investigators
6. Subjects who are willing to be contacted and interviewed by trial investigators, should the need arise for adverse event assessment, etc
7. Subjects must be able to communicate well with the investigator or designee, to understand and comply with the requirements of the study and to understand and sign the written informed consent

Participant type(s)
Patient

Age group
Senior

Sex
Both

Target number of participants
33,000

Key exclusion criteria
1. Subjects who are currently prescribed anti-ulcer therapy such as H2-receptor antagonists and proton-pump inhibitors
2. Subjects who are currently prescribed oral non-steroidal anti-inflammatory drugs (NSAIDs)
3. Subjects who have a known intolerance or allergy to H. pylori eradication treatment
4. Subjects who are taking drugs with a clinically significant interaction with H. pylori eradication treatment
5. Subjects who are terminally ill or suffer from a life-threatening co-morbidity
6. Subjects whose behaviour or lifestyle would render them less likely to comply with study medication (eg. alcoholism, substance abuse, debilitating psychiatric conditions or inability to provide informed consent)
7. Subjects currently participating in another interventional clinical trial or who have taken part in a trial in the previous three months

Date of first enrolment
01/03/2012

Date of final enrolment
01/04/2017

Locations

Countries of recruitment

England

Northern Ireland

United Kingdom

Study participating centre
Nottingham Digestive Diseases Centre
Nottingham
United Kingdom
NG7 2UH

Study participating centre
University of Southampton
United Kingdom
SO17 1BJ

Study participating centre
Durham University
United Kingdom
DH1 3LE

Study participating centre
University of Oxford
United Kingdom
OX1 2JD

Study participating centre
University of Birmingham
United Kingdom
B15 2TT

Study participating centre
Queens University Belfast
United Kingdom
BT7 1NN

Sponsor information

Organisation
University of Nottingham (UK)

Sponsor details
Research Innovation Services
King's Meadow Campus
Lenton Lane
Nottingham
England
United Kingdom
NG7 2NR

Sponsor type
University/education

Website
http://www.nottingham.ac.uk/

ROR
https://ror.org/01ee9ar58

Funder(s)

Funder type
Government

Funder Name
Health Technology Assessment Programme (UK) ref: 09/55/52

Alternative Name(s)
NIHR Health Technology Assessment Programme, HTA

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Publication and dissemination plan
To be confirmed at a later date

Intention to publish date
31/07/2022

Individual participant data (IPD) sharing plan

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?
Protocol article	protocol	10/07/2015		Yes	No
Results article		05/11/2022	13/06/2023	Yes	No
HRA research summary			28/06/2023	No	No