Barretts oesophagus screening trial in a case control study

Submission date	Recruitment status No longer recruiting	Prospectively registered		
16/06/2011		☐ Protocol		
Registration date	Overall study status Completed	Statistical analysis plan		
05/08/2011		[X] Results		
Last Edited 18/04/2017	Condition category Digestive System	[] Individual participant data		

Plain English summary of protocol

http://cancerhelp.cancerresearchuk.org/trials/a-study-to-see-how-well-a-new-way-screening-for-barretts-oesophagus-works-best2

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

A091986, Ethics reference - 10/H0308/71

Study information

Scientific Title

Evaluation of a non-endoscopic immunocytological device (Cytosponge) for Barretts oEsophagus Screening Trial in a case control study: BEST 2

Acronym

BEST 2

Study objectives

The purpose of the study is to obtain more accurate data on the potential of the Cytosponge as a screening modality (in conjunction with trifoil factor (TFF3) for Barrett's oesophagus (BE), and to find out its potential to determine the risk of cancer progression (in conjunction with biomarkers of risk).

The primary objectives of the study are:

- 1. Performance and safety characteristics of the Cytosponge test
- 2. Effectiveness of the Cytosponge for diagnosing BE compared with endoscopy, including specificity (from controls) and sensitivity (from cases).
- 3. For patients with BE, the ability of Cytosponge biomarkers to risk stratify patients, according to their future cancer risk, in comparison with the dysplasia grade obtained from endoscopic biopsies.

Ethics approval required

Old ethics approval format

Ethics approval(s)

National Research Ethics Services Cambridgeshire Research Ethics Committee, 25/10/2010, ref: 10/H0308/71

Study design

Case control study

Primary study design

Observational

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Barrett's oesophagus

Interventions

500-700 cases and 500-700 controls [a range is given because this will vary slightly depending on the prevalence of dysplastic cases in order to give us 100 cases of low grade dysplasia (LGD) and 100 high grade dysplasia (HGD)]. Any patient clinically fit for an endoscopy with Barretts oesophagus (for the cases) and (or) with upper GI symptoms of reflux or dyspepsia as an indication for endoscopy. Individuals must be able to provide informed consent.

A case control study design in which the cases will be patients with known Barretts oesophagus (BE) and controls individuals with reflux or indigestion (dyspepsia) symptoms referred for endoscopy. Four centres with expertise in Barretts oesophagus will recruit patients. All participants will swallow the Cytosponge device prior to having an endoscopy. The Cytosponge will be processed for a number of different biomarkers. The results will be compared with the endoscopy findings.

Statistical methods for proportions including estimation of proportions with confidence intervals and testing for difference between two proportions and trends in proportions.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

- 1. Performance and safety characteristics of the Cytosponge test
- 2. Effectiveness of the Cytosponge for diagnosing BE compared with endoscopy, including specificity (from controls) and sensitivity (from cases)
- 2. For patients with BE, the ability of Cytosponge biomarkers to risk stratify patients in comparison with dysplasia grade obtained from endoscopic biopsies

Key secondary outcome(s))

- 1. Differential sensitivity of screening BE with dysplasia (low and high grade) compared to non-dysplastic BE
- 2. Determine the reproducibility of the Cytosponge result by repeated testing in a subset of individuals
- 3. Logistics of high-throughput sample processing and automated analysis of Cytosponge specimens for use in routine National Health Services (NHS) or other health care settings.

Completion date

31/12/2016

Eligibility

Key inclusion criteria

- 1. Any participant 18 years and above clinically fit for an endoscopy with Barretts oesophagus (Cases) with or without upper gastrintestinal (GI) symptoms
- 2. Any participant 18 years and above clinically fit for an endoscopy with upper GI symptoms of reflux or dyspepsia as an indication for endoscopy / gastroscopy (Controls)
- 3. Ability to provide informed consent
- 4. Patients who have undergone endoscopic mucosal resection (EMR) for high grade dysplasia and due for repeat endoscopy

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Αll

Key exclusion criteria

- 1. Individuals with a diagnosis of an oro-pharynx, oesophageal or gastro-oesophageal tumour, or symptoms of dysphagia
- 2. Oesophageal varices, stricture or requiring dilatation of the oesophagus
- 3. On anticoagulation therapy / medication (warfarin, clopridogrel, heparin or tinzaparin)
- 4. Individuals who have had a myocardial infarction or any cardiac event less than six months ago
- 5. Individuals who have had a cerebrovascular event < 6 months ago where their swallowing has been affected
- 6. Patients who have had previous treatment such as photodynamic therapy (PDT) or radio frequency ablation (RFA)
- 7. Participants who are unable to provide informed consent
- 8. Participants under age 18
- 9. Participants who exclude beef from their diet as the gelatine is beef based. This can be discussed with the patient
- 10. Endoscopy is generally avoided in pregnant women and therefore it is unlikely that any pregnant women will be included although pregnancy would not be an absolute contraindication. Pregnancy / pregnancy test will not be recorded as part of the trial

Date of first enrolment

07/07/2011

Date of final enrolment

31/12/2016

Locations

Countries of recruitment

United Kingdom

England

Study participating centre
Hutchison/MRC Research Centre
Cambridge
United Kingdom
CB2 0XZ

Sponsor information

Organisation

Cambridge University Hospitals NHS Foundation Trust (UK)

ROR

https://ror.org/04v54gj93

Funder(s)

Funder type

Charity

Funder Name

Cancer Research UK (CRUK) (UK)

Alternative Name(s)

CR_UK, Cancer Research UK - London, Cancer Research UK (CRUK), CRUK

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/01/2017		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes