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ENDCaP-C test accuracy study

Submission date
08/01/2015

Recruitment status
No longer recruiting

Registration date
11/05/2015

Overall study status
Completed

Last Edited
26/01/2021

Condition category
Digestive System

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Ulcerative colitis (UC) is a long-term condition where the colon and rectum become inflamed. It affects over 30,000 patients in the UK and patients with long-term UC are at an increased risk of developing bowel cancer. Timely recognition of the development of cancer is vital in order to improve outcome for patients. Currently in the UK patients undergo regular and thorough surveillance of the colon to look for the early signs of cancer. Unfortunately this is not adequate and the mortality from late-detected colitis-associated cancers remains high. The main aim of this study is to evaluate the ability of a new diagnostic test to detect patients at high risk of developing colon cancer compared to histology. The test is based on determining whether certain genes that protect against the development of cancer have been inactivated and if effective, could result in a significant change in practice.

Who can participate?
This study aims to recruit up to 1000 patients across NHS hospitals in the UK that have active long-term inflammatory bowel disease endoscopic surveillance programmes. Eligible patients will have UC (either for at least 10 years with extensive disease, or also have primary sclerosing cholangitis), will be on the surveillance programme and undergoing a routine colonoscopy during the study period, have no previous history of colorectal cancer and meet the rest of the rest of the eligibility criteria.

What does the study involve?
All patients will undergo a routine surveillance colonoscopy. In addition to the routine biopsies, an additional five biopsies will be taken. If cancer or the early stages of cancer are detected, then the patient will be offered surgery. Patients for which the new test detects cancer but histology does not, will undergo a repeat colonoscopy at 4 to 12 months. Patients will be followed up through routinely collected data sources, to include, for example, cancer development and long-term survival.

What are the possible benefits and risks of participating?
There may be no direct benefit in taking part in this study, however, participants may benefit from that any pre-cancer changes will be detected early which would ensure that treatments could be started earlier. It has been shown that starting treatment earlier is often more effective. The study may involve an extra colonoscopy between 6 and 9 months after entry into the study. This will involve standard bowel preparation (including laxatives or an enema). A

sedative and pain killers may also be given during the colonoscopy. The procedure will be of roughly the same duration as the initial colonoscopy. There is a very small risk (a 1 in 1000 chance) with colonoscopy of bowel perforation or bleeding. If this happened, an operation would be required to repair the hole. At the second colonoscopy you will also be asked to provide a stool sample and to collect a small blood sample.

Where is the study run from?
University of Birmingham (UK)

When is the study starting and how long is it expected to run for?
From November 2014 to May 2018

Who is funding the study?
NIHR Efficacy and Mechanism Evaluation (UK)

Who is the main contact?
Dr Steve Johnson
As of 10/02/2017: Laura Magill

Study website
http://www.birmingham.ac.uk/ENDCaP-C

Contact information

Type(s)
Scientific

Contact name
Dr Laura Magill

Contact details
Birmingham Clinical Trials Unit
University of Birmingham
Edgbaston
Birmingham
United Kingdom
B15 2TT

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
17739

Study information

Scientific Title
Enhanced Neoplasia Detection and Cancer Prevention in Chronic Colitis (ENDCaP-C): a multicentre test accuracy study

Acronym
ENDCaP-C

Study objectives
The main aim of this study is to evaluate the ability of a new diagnostic test to detect patients at high risk of developing colon cancer compared to histology.

Ethics approval required
Old ethics approval format

Ethics approval(s)
First MREC approval date 30/10/2014, ref: 14/LO/1842

Study design
Non-randomised; Observational; Design type: Cohort study

Primary study design
Observational

Secondary study design
Cohort study

Study setting(s)
Hospital

Study type(s)
Diagnostic

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
Topic: Gastroenterology; Subtopic: Gastroenterology; Disease: All Gastroenterology

Interventions
Current interventions as of 21/05/2018:
Colonoscopy and biopsy: patients will have five biopsy samples taken at their routine surveillance colonoscopy. Biopsy samples will be histologically analysed and methylation status will be determined.

Patients that have a positive methylation test but negative histology will undergo a second colonoscopy at 4-12 months and an additional five biopsy samples will be taken. Histology and methylation status will be determined.

A selection of patients that have a negative methylation test but negative histology will undergo a second colonoscopy at 4-12 months and five biopsy samples will be taken. Histology and methylation status will be determined.

Study Entry: Registration only

Previous interventions:
Colonoscopy and biopsy: patients will have five biopsy samples taken at their routine surveillance colonoscopy. Biopsy samples will be histologically analysed and methylation status will be determined.

Patients that have a positive methylation test but negative histology will undergo a second colonoscopy at 6 months and an additional five biopsy samples will be taken. Histology and methylation status will be determined.

Added 10/02/2017: A selection of patients that have a negative methylation test but negative histology will undergo a second colonoscopy at 6-9 months and five biopsy samples will be taken. Histology and methylation status will be determined.

Study Entry: Registration only

Intervention Type
Procedure/Surgery

Primary outcome measure
Current outcome measures as of 21/05/2018:
1. The presence of dysplasia in a mucosal biopsy taken at follow up colonoscopy at 4-12 months
2. The presence of hypermethylation and dysplasia in a mucosal biopsy taken at follow up colonoscopy at 4-12 months

Previous outcome measures as of 10/02/2017:
1. The presence of dysplasia in a mucosal biopsy taken at follow up colonoscopy at 6-9 months
2. The presence of hypermethylation and dysplasia in a mucosal biopsy taken at follow up colonoscopy at 6-9 months

Previous primary outcome measures:
1. The occurrence of dysplasia in mucosal biopsies taken at follow-up colonoscopy at 4-6 months in patients demonstrating hypermethylation (the positive predictive value)
2. The ability of hypermethylation to discriminate between patients with and without dysplasia in mucosal biopsies taken at follow up colonoscopy at 4-6 months (the diagnostic odds ratio)

Secondary outcome measures
Current secondary outcome measure as of 10/02/2017:
Complications from colonoscopy

Previous outcome measures:
1. Correlation of dysplasia in mucosal biopsies with the presence of significant hypermethylation in nondysplastic biopsies taken at the same procedure
2. Correlation of dysplasia with hypermethylation in the same biopsy
3. Correlation of methylation in biopsies from initial and reference colonoscopy
4. Complications from colonoscopy

Overall study start date
13/11/2014

Completion date
31/05/2018

Eligibility

Key inclusion criteria
Current inclusion criteria as of 21/05/2018:
1. Diagnosis of chronic ulcerative colitis with symptoms for over 10 years or diagnosis of primary sclerosing cholangitis (PSC)
2. On the surveillance programme and undergoing a routine colonoscopy during the study period
3. Willing to accept the possibility of an additional colonoscopy between 4 months and 12 months
4. No previous history of colorectal cancer
5. Aged 18 years or over
6. Be able and willing to provide written informed consent for the study

Previous inclusion criteria:
1. Diagnosis of chronic ulcerative colitis of over 10 years duration and disease beyond the splenic flexure or known primary sclerosing cholangitis
2. Scheduled for surveillance colonoscopy during study period
3. Willing to accept the possibility of an additional colonoscopy between 6 months and 9 months
4. No previous history of colorectal cancer
5. Aged 18 years or over
6. Be able and willing to provide written informed consent for the study

Participant type(s)
Patient

Age group
Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
Planned Sample Size: 1000; UK Sample Size: 1000

Total final enrolment
818

Key exclusion criteria
Current exclusion criteria as of 21/05/2018:
1. Patients with fulminant colitis (if not PSC)
2. Bowel obstruction

3. Patients for whom it is not possible to undergo complete colonoscopies
4. Patients with proctitis only
5. Crohn's colitis patients (if no PSC)
6. Patients with unclassified IBD (if no PSC)
7. Patients with microscopic colitis (if no PSC)
8. Unable to give written informed consent
9. Aged under 18 years

Previous exclusion criteria:
1. Patients with fulminant colitis
2. Bowel obstruction
3. Patients in whom it is not possible to do complete colonoscopies
4. Patients with proctitis only
5. Crohn's colitis patients
6. Patients with unclassified IBD
7. Patients with microscopic colitis
8. Unable to give written informed consent
9. Less than 18 years of age

Date of first enrolment
13/11/2014

Date of final enrolment
31/03/2017

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
Queen Elizabeth Hospital Birmingham
United Kingdom
B15 2TH

Study participating centre
Heartlands Hospital
United Kingdom
B9 5SS

Study participating centre

New Cross Hospital
United Kingdom
WV10 0QP

Study participating centre
Russells Hall Hospital
United Kingdom
DY1 2HQ

Study participating centre
Manor Hospital
United Kingdom
WS2 9PS

Study participating centre
City Hospital, Birmingham
United Kingdom
B18 7QH

Study participating centre
St Mark's Hospital
United Kingdom
HA1 3UJ

Study participating centre
John Radcliffe Hospital
United Kingdom
OX3 9DU

Study participating centre
St James’s University Hospital
United Kingdom
LS9 7TF

Study participating centre

Royal Liverpool University Hospital
United Kingdom
L7 8XP

Study participating centre
Addenbrooke's Hospital
United Kingdom
CB2 0QQ

Study participating centre
Leicester General Hospital
United Kingdom
LE5 4PW

Study participating centre
Salford Royal Hospital
United Kingdom
M6 8HD

Study participating centre
Blackpool Victoria Hospital
United Kingdom
FY3 8NR

Study participating centre
Bournemouth Royal Hospital
United Kingdom
BH7 7DW

Study participating centre
Royal United Hospital Bath
United Kingdom
BA1 3NG

Study participating centre

West Middlesex University Hospital
United Kingdom
TW7 6AF

Study participating centre
Basingstoke and North Hampshire Hospital
United Kingdom
RG24 9NA

Study participating centre
Queen Alexandra Hospital
United Kingdom
PO6 3LY

Study participating centre
St Mary's Hospital, Isle of Wight
United Kingdom
PO30 5TG

Study participating centre
Basildon University Hospital
Basildon
United Kingdom
SS16 5NL

Study participating centre
Whipps Cross University Hospital
London
United Kingdom
E11 1NR

Study participating centre
James Cook University Hospital
Middlesbrough
United Kingdom
TS4 3BW

Study participating centre
Hull Royal Infirmary
Hull
United Kingdom
HU3 2JZ

Study participating centre
Princess Alexandra Hospital
Harlow
United Kingdom
CM20 1QX

Study participating centre
North Tyneside General Hospital
North Shields
United Kingdom
NE29 8NH

Study participating centre
Darlington Memorial Hospital
Darlington
United Kingdom
DL3 6HX

Study participating centre
Kettering General Hospital
Kettering
United Kingdom
NN16 8UZ

Study participating centre
King's Mill Hospital
Sutton-in-Ashfield
United Kingdom
NG17 4JL

Study participating centre
Luton and Dunstable University Hospital
Luton

United Kingdom
LU4 0DZ

Study participating centre
St Mary's Hospital (Paddington)
London
United Kingdom
W2 1NY

Study participating centre
Queen Elizabeth Hospital (Gateshead)
Gateshead
United Kingdom
NE9 6SX

Sponsor information

Organisation
University of Birmingham

Sponsor details
Edgbaston
Birmingham
England
United Kingdom
B15 2TT
-
Researchgovernance@Contacts.bham.ac.uk

Sponsor type
University/education

Website
www.birmingham.ac.uk

ROR
https://ror.org/03angcq70

Funder(s)

Funder type

Government

Funder Name
NIHR Efficacy and Mechanism Evaluation; Grant Codes: EME/11/100/29

Results and Publications

Publication and dissemination plan
A final report will be submitted for publication in the NIHR Journals Library, as required by the contract for funding for the trial. It is also intended that papers on aspects of the study will be will be submitted to high-impact peer reviewed journals.

Intention to publish date
31/05/2019

Individual participant data (IPD) sharing plan
All data requests should be submitted to the Dr Laura Magill (e.l.magill@bham.ac.uk). Access to available anonymised data may be granted following review.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/01/2021	26/01/2021	Yes	No
HRA research summary			28/06/2023	No	No