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Prospective randomised trial comparing computed tomography (CT) and barium enema for colonic investigation in elderly patients

Submission date 12/09/2003	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [_] Record updated in last year
Registration date 12/09/2003	**Overall study status** Completed	
Last Edited 30/09/2016	**Condition category** Surgery	

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N0515103409

Study information

Scientific Title
Prospective randomised trial comparing computed tomography (CT) and barium enema for colonic investigation in elderly patients

Study objectives
Colonic investigation in the elderly is often difficult. Colonoscopy, because of sedation, is associated with increased cardiorespiratory complications in older people. Barium enema is widely utilised but approximately 30% of studies are incomplete in the elderly due to technical difficulties with bowel preparation and incontinence. Additionally, bowel preparation may cause faecal incontinence, sleep disturbance and perianal soreness, and has been associated with altered plasma biochemistry. CT scanning has been investigated as a more acceptable alternative in elderly patients. No bowel preparation is necessary, the scan is quick, and no sedation is required. Although CT is unable to detect colonic polyps without full bowel cleansing, these lesions are unimportant in an elderly symptomatic group. Where colorectal carcinoma is the target lesion, previous studies have compared CT followed by barium enema in elderly symptomatic patients and found CT equally able to detect colorectal carcinoma whilst being technically easier to perform and more acceptable to patients. Furthermore, extracolonic pathology is also visible. There are no prospective, randomised trials of this approach, which is the aim of this study.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Not provided at time of registration

Study design
Randomised controlled trial

Primary study design
Interventional

Study type(s)
Diagnostic

Health condition(s) or problem(s) studied
Surgery: Colonoscopy

Interventions
It is proposed that all hospital clinician referrals for barium enemas in patients over 75 years of age will be randomised to either CT or barium enema. Those randomised to barium enema will be booked in the usual fashion and the enema performed on a routine oupatient list. These patients will be informed of their inclusion in the trial by letter and consent obtained. Those patients not consenting will be sent a barium enema appointment as requested but their data will not be included in the trial. Those patients randomised to CT will be contacted by letter and invited to have a CT scan instead of a barium enema. Consenting patients will undergo a standard CT of the abdomen and pelvis with oral, and rectal and iv contrast as per usual practice. The CT will be reported in the usual fashion with specific comment as to the normality or otherwise of the colon. Results will be available to the referring clinician as per usual practice who is then free to request any further investigation deemed necessary. All patients will undergo long term follow up with reference made to clinical notes, results of further

investigations, surgical notes pathology and post mortem reports and cancer registry data. The efficacy of CT (and barium enema) for detection of colorectal carcinoma will be assessed along with the influence on patient diagnosis and management of any extracolonic pathology detected. Patient experiences of the two tests will be investigated by questionnaire.

Intervention Type
Procedure/Surgery

Phase
Not Specified

Primary outcome(s)
CT assessment of colorectal carcinoma will be made as per published criteria. Patient outcome will be assessed by long term clinical follow up and the use of the results of further radiological and pathological investigations.

Key secondary outcome(s))
Not provided at time of registration

Completion date
30/04/2003

Eligibility

Key inclusion criteria
Adults aged 75 years or older

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Senior

Sex
All

Key exclusion criteria
Does not match inclusion criteria

Date of first enrolment
01/06/2001

Date of final enrolment
30/04/2003

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
North West London Hospitals NHS Trust
Harrow, Middlesex
United Kingdom
HA1 3UJ

Sponsor information

Organisation
Department of Health (UK)

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
North West London Hospitals NHS Trust (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

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