The use of aminolaevulinic acid (ALA) and photodynamic therapy (PDT) in the treatment of Barrett's oesophagus

Submission date	Recruitment status No longer recruiting	Prospectively registered		
23/01/2004		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
23/01/2004	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
12/12/2013	Digestive System			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

Study objectives

Barrett's oesophagus is an acquired condition due to long-standing acid reflux which destroys the normal oesophageal lining. This is replaced by a lining which carries a significant risk of malignant change. Current therapeutic approaches aim to reduce oesophageal exposure to refluxing stomach contents either by medical or surgical means, but this may not prevent the development of cancer. Alternate forms of therapy are therefore required. PDT is a new form of cancer treatment in which cell damage is achieved by the action of laser light of specific wavelength upon a light sensitive drug which is taken up by malignant or pre-malignant tissue. This results in targeting of the treatment to the tumour and limits normal tissue damage. The clinical use of PDT has been restricted by the side effects of the light sensitive drugs. A new agent, ALA with few side effects has been successfully used in the treatment of skin and bladder cancer. The aim of the study is to evaluate the use of PDT using ALA and green light delivered from a copper vapour laser in the treatment of Barrett's oesophagus. The researchers also aim to quantify and characterise tissue porphyrin levels from biopsy samples, which has not previously been done in this condition.

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

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Barrett's oesophagus

Interventions

Patients will be randomised either to a treatment group (receiving treatment as above) or a control group (where the treatment will be identical except that no ALA will be added to the carrier medium). The clinician and the patient will be blinded to the group to which individuals are allocated. As gastric acid suppression with omeprazole has been shown to have a partial effect in reversing Barrett's oesophagus and reduced exposure to acid may encourage reepithelialisation with normal squamous mucosa, all patients will receive omeprazole.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Aminolaevulinic acid

Primary outcome measure

Ablation of low grade dysplastic epithelium

Secondary outcome measures

Not provided at time of registration

Overall study start date

01/04/1995

Completion date

31/03/1996

Eligibility

Key inclusion criteria

Patients with biopsy proven high grade dysplasia associated with Barrett's oesophagus who would otherwise require oesophagogastrectomy will be offered ALA-induced PDT. Two groups:

- 1. Patients with high grade dysplasia who will receive PDT followed by surgery if there is no response
- 2. Patients with low grade dysplasia who are at lower risk of carcinoma will be entered into a controlled trial and followed up by endoscopy to assess the efficacy and duration of any treatment effects.

Participant type(s)

Patient

Age group

Not Specified

Sex

Not Specified

Target number of participants

Not provided at time of registration

Key exclusion criteria

Not provided at time of registration

Date of first enrolment

01/04/1995

Date of final enrolment

31/03/1996

Locations

Countries of recruitment

England

United Kingdom

Study participating centre

Department of Surgery and Anaesthetics

Sheffield United Kingdom

S10 2JF

Sponsor information

Organisation

NHS R&D Regional Programme Register - Department of Health (UK)

Sponsor details

The Department of Health Richmond House 79 Whitehall London United Kingdom SW1A 2NL +44 (0)20 7307 2622 dhmail@doh.gsi.org.uk

Sponsor type

Government

Website

http://www.doh.gov.uk

Funder(s)

Funder type

Government

Funder Name

NHS Executive Trent

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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?
Results article	results	01/11/2000		Yes	No