Investigation into the use of radiofrequency ablation for the treatment of watermelon stomach

Submission date	Recruitment status	Prospectively registered
06/06/2016	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
14/06/2016	Completed	[X] Results
Last Edited	Condition category	[] Individual participant data
07/09/2020	Circulatory System	

Plain English summary of protocol

Background and study aims

Gastric antral vascular ectasia (GAVE), also known as watermelon stomach, is a rare condition in which the lining of the stomach bleeds, giving it the characteristic stripes of a watermelon. The exact cause is unknown, however it is associated with the dilation (widening) of the small blood vessels in the last part of the stomach (antrum), which lead to bleeding. This often causes severe anaemia (low red blood cell count or iron levels), which requires treatment with iron supplements or blood transfusions. Radiofrequency ablation (RFA) is a procedure in which the affected tissue (in this case, the dilated blood vessels) are destroyed using heat. The procedure is guided by an endoscope (camera on the end of a thin, flexible tube that is passed into the stomach via the mouth), and targets the affected blood vessels at the bottom of the stomach. The aim of this study is to test the effectiveness of the endoscopic RFA procedure in the treatment of GAVE.

Who can participate?

Adult patients with GAVE that has led to anaemia, who are undergoing endoscopic RFA treatment.

What does the study involve?

All participants undergo RFA treatment for their GAVE. Immediately before the treatment and six months later, participants complete a questionnaire about their quality of life. 6-8 weeks after the RFA treatment, part of standard care given involves a follow up endoscopy to assess how well the treatment has worked. The results of this are recorded by the investigators. Over the 6 months after treatment, the participant's medical notes are reviewed in order to record the amount of blood transfusions they have had as well as their red blood cell count (sign of anaemia).

What are the possible benefits and risks of participating? There are no direct benefits or risks involved with participating in this study. Where is the study run from? University College Hospital (UK)

When is the study starting and how long is it expected to run for? September 2015 to March 2018

Who is funding the study? University College London (UK)

Who is the main contact? Dr Rehan Haidry

Contact information

Type(s)

Public

Contact name

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Additional identifiers

Protocol serial number

Version 1

Study information

Scientific Title

RadioFrequency Ablation for Gastric Antral Vascular Ectasia

Acronym

RFA for GAVE

Study objectives

The aim of this study is to investigate the effectiveness of radiofrequency ablation (RFA) for the treatment of gastric antral vascular ectasia (GAVE).

Ethics approval required

Old ethics approval format

Ethics approval(s)

NRES Committee London - Central, 03/02/2016, ref: 16/LO/0149

Study design

Longitudinal case-control study

Primary study design

Observational

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Gastric antral vascular ectasia (GAVE)

Interventions

All patients receive radiofrequency ablation (RFA) for the treatment of gastric antral vascular ectasia (GAVE) coupled with standard care. The usual care pathway involves regular blood tests to assess the requirement for blood transfusions or iron supplementation both before and after any endoscopic intervention. Following a treatment with RFA, a repeat endoscopy is performed 6-8 weeks later to assess a response to treatment and apply further therapy should it be indicated. Should it be necessary to repeat RFA then a further endoscopy 6-8 weeks later may also be performed.

In this study, immediately before and six months after undergoing RFA, participants complete a quality of life questionnaire. In addition, over the six months following treatment, transfusion requirements and haemoglobin concentrations of patients and data from any follow up endoscopies is collected through medical note review in order to assess the effectiveness of the treatment pathway.

Intervention Type

Procedure/Surgery

Primary outcome(s)

- 1. Quality of life is measured using the Functional Assessment of Chronic Illness Therapy fatigue scale (FACIT-F) questionnaire at baseline (pre-RFA) and 6 months post-RFA
- 2. Number of red blood cell (RBC) packs transfused (transfusion requirement), parenteral iron requirements and haemoglobin concentrations (g/dL) are measured by reviewing patient notes and blood tests at baseline (pre-RFA) and 6 months post-RFA

Key secondary outcome(s))

- 1. Number of endoscopy treatment sessions are measured by reviewing patient notes at baseline (pre-RFA) and 6 months post-RFA
- 2. Percentage surface regression in macroscopically evident GAVE is measured during endoscopy at any follow up endoscopy in the 6 months post-treatment

Completion date

01/03/2018

Eligibility

Key inclusion criteria

- 1. Existing diagnosis of GAVE that has resulted in anaemia requiring either intravenous iron replacement or blood transfusion
- 2. Undergoing endoscopic treatment with RFA
- 3. Aged 18 years and over

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

20

Key exclusion criteria

- 1. Active malignancy
- 2. Anaemia due to other cause such as coeliac disease, small bowel pathology or haematological disease
- 3. Pregnancy

Date of first enrolment

01/09/2015

Date of final enrolment

01/09/2017

Locations

Countries of recruitment

United Kingdom

England

Study participating centre University College Hospital

235 Euston Road Fitzrovia, London London

Sponsor information

Organisation

University College London

ROR

https://ror.org/02jx3x895

Funder(s)

Funder type

University/education

Funder Name

University College London

Alternative Name(s)

University College London in United Kingdom, Collegium Universitatis Londinensis, UCL

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Available on request

Study outputs

Output type

Results article	01/03/2019	07/09/2020 Yes	No
HRA research summary		28/06/2023 No	No
Participant information sheet	11/11/2025	11/11/2025 No	Yes