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A UK study of minimally invasive emergency treatment of sudden bleeding from the lower bowel

Submission date
21/01/2026

Recruitment status
Recruiting

Registration date
15/04/2026

Overall study status
Ongoing

Last Edited
07/05/2026

Condition category
Circulatory System

[ ] Prospectively registered
[X] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Bleeding from the gut can be life-threatening and can lead to hospitalisation, serious complications or death. Traditionally, surgery has been used to stop the bleeding, but this can carry significant risks.
Interventional radiology plays an important role in diagnosis and treatment. Small catheters can be placed by pinhole techniques and directed by X-rays to examine the blood vessels and find the source of bleeding. If a bleeding source is identified, an embolisation procedure can be performed to block the affected blood vessel. During embolisation, the doctor can inject small particles or coils into the artery through the catheter to stop blood flow to the bleeding area while allowing normal blood flow to the rest of the body. This is a quick and effective procedure and is now widely accepted as an effective way to manage life threatening bleeding, avoiding major surgery.
We will be looking back in time to identify patients who underwent embolisation for bleeding from the back passage. The aim is to analyse the current practice of emergency embolisation for this type of bleeding. We will assess predictors of successful embolisation and assess whether timing affects outcomes. The findings could help guide hospital policy and improve emergency management.

Who can participate?
Adult patients (≥18 years) who have undergone transcatheter arterial embolisation for acute non-variceal lower gastrointestinal bleeding at participating centres during the study period will be eligible for inclusion. Patients with upper gastrointestinal bleeding or variceal bleeding will be excluded.

What does the study involve?
This study is a retrospective observational study. No additional tests, procedures or hospital visits are required. Researchers will review existing hospital records, imaging reports and procedural documentation to collect information about patients who have previously

undergone embolisation for lower gastrointestinal bleeding. Data collected will include clinical presentation, imaging findings, details of the embolisation procedure and patient outcomes such as rebleeding or complications.

What are the possible benefits and risks of participating?
Benefits:
Although there is no direct benefit to individual patients, the study aims to improve understanding of outcomes following embolisation for lower gastrointestinal bleeding. The findings will help inform future patient selection, procedural techniques and management strategies.
Risks:
There are no additional risks to patients as the study involves only the review of existing clinical records and imaging. No additional procedures or interventions are required.

Where is the study run from?
The study is coordinated from the United Kingdom and conducted across multiple participating centres internationally, including NHS hospitals and collaborating institutions.

When is the study starting and how long is it expected to run for?
February 2026 to October 2028

Who is funding the study?
Royal College of Radiologists and British Society of Interventional Radiology

Who is the main contact?
Deevia Kotecha, deevia.kotecha@gmail.com

Contact information

Type(s)
Principal investigator, Public, Scientific

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deevia.kotecha@gmail.com

Additional identifiers

Integrated Research Application System (IRAS)
351622

Central Portfolio Management System (CPMS)
71099

Study information

Scientific Title
A multi-centre retrospective observational study investigating outcomes after emergency transcatheter arterial embolisation for acute non-variceal lower GI bleeding

Acronym
MAGIC-Embo

Study objectives
Primary objective:
To establish the rate of mortality, rebleeding, re-intervention, embolisation failure and complications after embolisation for acute non-variceal lower GI bleeding

Secondary objectives:
1. To determine variations in embolisation technique/agents used and assess whether these impact on technical and clinical outcome
2. To determine clinical features that predict a successful or unsuccessful embolisation procedure
3. To determine whether CT imaging features correlate with DSA findings
4. To determine whether clinical variables correlate with DSA findings

Ethics approval required
Ethics approval not required

Ethics approval(s)

Primary study design
Observational

Secondary study design
Cross sectional study

Study type(s)

Health condition(s) or problem(s) studied
Patients who have undergone angiography +/- embolisation for acute non-variceal lower GI haemorrhage.

Interventions
Data will be collected by a named doctor as part of the IR trainee research collaborative (UNITE) or interventional radiology trainees, junior doctors and medical students at each participating centre and will be maintained on an anonymised (REDCap) database. They will be supervised by an Interventional Radiology Consultant who will be a permanent employee of that centre. This type of work is part of their expected role for the purposes of quality improvement and revalidation. Registrars will collect this data as part of their training time where there is a

requirement to be involved in audit and research. Applicants from participating sites can register to be an Associate PI for this study as part of the NIHR Associate Principal Investigator Scheme. All data will be anonymised prior to leaving the centre. All data will be collected using the purpose-built electronic database Research Electronic Data Capture (REDCap) platform, which is overseen by the University of Plymouth. No identifiable data (patient number, full name, date of birth) will be recorded or shared.
Data collected falls into the following categories (examples given after each category are not exhaustive):
Participant ID number (pseudo-anonymised)
Demographics: Age, gender, date of admission
Comorbidities
Pre-procedural imaging: Dates, modalities, diagnosis
Treatments offered prior to procedure: Antibiotics, IV fluids, blood transfusion, endoscopy
Procedure: Date, procedural findings
Intraoperative complications
Post-operative complications: Types, date of occurrence, treatment
Follow up: readmissions, 30-day mortality, cause of death, further interventions
The patients will not be contacted at any point. At no point will the data be identifiable outside the site at which embolisation was performed. Only anonymised data will be sent to the central research team for analysis.

Data will be collected, analysed and held on secure Trust PC and on the purpose-built electronic database Research Electronic Data Capture (REDCap) platform overseen by the University of Plymouth.
All data will be stored on a Trust computer in a password protected file with access only available by the local lead. Anonymised data only will be shared with the central team.

Archiving will be authorised by the Sponsor following submission of the end of study declaration. Upon completion of the study, study documents will be archived for a minimum of 5 years as per the participating Trust's Research Archiving SOP. Once the archiving retention period has been reached, the Sponsor will liaise with the CI regarding destruction.

Intervention Type
Not Specified

Primary outcome(s)
1. Mortality measured using review of electronic patient records and hospital discharge/death records to identify all-cause mortality following embolisation at within 30 days following embolisation, long term

2. Rebleeding after embolisation measured using review of electronic patient records, procedural reports and radiology reports to identify documented recurrent lower gastrointestinal bleeding requiring clinical reassessment or intervention at within 30 days post-embolisation

3. Re-intervention rate following embolisation measured using review of procedural records and patient notes to identify repeat endovascular intervention, surgery, or other procedures performed for recurrent bleeding at within 30 days post-embolisation

4. Embolisation failure measured using review of interventional radiology procedural reports and angiographic findings to determine inability to achieve haemostasis or need for immediate alternative treatment at time of index embolisation procedure

5. Procedure-related complications measured using review of patient notes, radiology reports and laboratory results to identify complications documented following embolisation at within 30 days following embolisation

Key secondary outcome(s))
1. Embolisation technique and embolic agent used measured using review of interventional radiology procedural reports documenting embolisation approach, vessel targeted and embolic material used (e.g., coils, particles, glue) at time of index embolisation procedure

2. Technical success of embolisation measured using review of angiographic procedural reports to determine successful embolisation of target vessel with cessation of contrast extravasation or stasis on angiography at time of index embolisation procedure

3. Clinical success of embolisation measured using review of patient records to determine resolution of bleeding without need for repeat intervention or surgery at index admission and within 30 days post-embolisation

4. Predictive clinical factors associated with embolisation success or failure measured using review of patient notes, laboratory results and admission records to extract variables such as haemodynamic status, transfusion requirements, comorbidities and anticoagulation use at baseline (time of admission)

5. CT imaging findings in lower GI bleeding measured using review of CT reports and imaging performed prior to embolisation to identify features such as active contrast extravasation, bowel wall abnormalities or vascular lesions at pre-embolisation imaging

6. Correlation between CT findings and digital subtraction angiography findings measured using comparative review of CT imaging reports and angiographic findings from procedural reports at pre-embolisation CT and index angiography procedure

7. Correlation between clinical variables and angiographic findings measured using review of clinical records (vital signs, haemoglobin levels, transfusion requirements) compared with angiographic findings documented in IR procedural reports at baseline admission and index embolisation procedure

Completion date
01/10/2028

Eligibility

Key inclusion criteria
1. Adult patients (aged 16 years or more) undergoing emergency embolisation for acute non-variceal lower GI bleeding
2. Date of procedure from 01/01/2023 to 01/06/2025

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
16 years

Upper age limit
150 years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. Patients who underwent embolisation for variceal GI bleeding
2. Patients who underwent embolisation for upper GI bleeding
3. Patients who underwent embolisation for chronic gastrointestinal bleeding (defined as >30 days)

Date of first enrolment
01/02/2026

Date of final enrolment
01/02/2028

Locations

Countries of recruitment
United Kingdom

England

Northern Ireland

Scotland

Wales

Australia

Ireland

New Zealand

Singapore

Study participating centre
University Hospitals Plymouth NHS Trust
Derriford Hospital

Derriford Road
Derriford
Plymouth
England
PL6 8DH

Study participating centre
Norfolk and Norwich University Hospitals NHS Foundation Trust
Colney Lane
Colney
Norwich
England
NR4 7UY

Study participating centre
Sheffield Teaching Hospitals NHS Foundation Trust
Northern General Hospital
Herries Road
Sheffield
England
S5 7AU

Study participating centre
Oxford University Hospitals NHS Foundation Trust
John Radcliffe Hospital
Headley Way
Headington
Oxford
England
OX3 9DU

Study participating centre
Liverpool University Hospitals NHS Foundation Trust
Royal Liverpool University Hospital
Prescot Street
Liverpool
England
L7 8XP

Study participating centre

Hull University Teaching Hospitals NHS Trust
Hull Royal Infirmary
Anlaby Road
Hull
England
HU3 2JZ

Study participating centre
Aberdeen Royal Infirmary
Foresterhill Road
Aberdeen
Scotland
AB25 2ZN

Study participating centre
West Suffolk NHS Foundation Trust
West Suffolk Hospital
Hardwick Lane
Bury St. Edmunds
England
IP33 2QZ

Study participating centre
Cambridge University Hospitals NHS Foundation Trust
Cambridge Biomedical Campus
Hills Road
Cambridge
England
CB2 0QQ

Study participating centre
Gloucestershire Hospitals NHS Foundation Trust
Cheltenham General Hospital
Sandford Road
Cheltenham
England
GL53 7AN

Study participating centre
The Newcastle upon Tyne Hospitals NHS Foundation Trust
Freeman Hospital

Freeman Road
High Heaton
Newcastle upon Tyne
England
NE7 7DN

Study participating centre
London North West University Healthcare NHS Trust
Northwick Park Hospital
Watford Road
Harrow
England
HA1 3UJ

Study participating centre
Imperial College Healthcare NHS Trust
The Bays
St Marys Hospital
South Wharf Road
London
England
W2 1BL

Study participating centre
University Hospital Southampton NHS Foundation Trust
Southampton General Hospital
Tremona Road
Southampton
England
SO16 6YD

Study participating centre
Greater Glasgow and Clyde
Gartnavel Royal Hospital
1055 Great Western Road
Glasgow
Scotland
G12 0XH

Study participating centre

Lancashire Teaching Hospitals NHS Foundation Trust
Royal Preston Hospital
Sharoe Green Lane
Fulwood
Preston
England
PR2 9HT

Study participating centre
Northampton
Northampton General Hospital
Cliftonville
Northampton
England
NN1 5BD

Study participating centre
Royal Stoke University Hospital
Newcastle Road
Stoke-on-trent
England
ST4 6QG

Study participating centre
East Kent Hospitals University NHS Foundation Trust
Kent & Canterbury Hospital
Ethelbert Road
Canterbury
England
CT1 3NG

Study participating centre
Royal United Hospitals Bath NHS Foundation Trust
Combe Park
Bath
England
BA1 3NG

Study participating centre
East Suffolk and North Essex NHS Foundation Trust
Colchester Dist General Hospital

Turner Road
Colchester
England
CO4 5JL

Study participating centre
Cardiff and Vale U H B
St. Davids Hospital
Cowbridge Road East
Cardiff
Wales
CF11 9XB

Study participating centre
Nottingham University Hospitals NHS Trust - Queen's Medical Centre Campus
Nottingham University Hospital
Derby Road
Nottingham
England
NG7 2UH

Study participating centre
Dorset County Hospital NHS Foundation Trust (uhs)
Dorset County Hospital
Williams Avenue
Dorchester
England
DT1 2JY

Study participating centre
Leeds Teaching Hospitals NHS Trust
St. James's University Hospital
Beckett Street
Leeds
England
LS9 7TF

Study participating centre
Royal Free London NHS Foundation Trust
Royal Free Hospital
Pond Street

London
England
NW3 2QG

Study participating centre
The Royal Wolverhampton NHS Trust
New Cross Hospital
Wolverhampton Road
Heath Town
Wolverhampton
England
WV10 0QP

Study participating centre
York and Scarborough Teaching Hospitals NHS Foundation Trust
York Hospital
Wigginton Road
York
England
YO31 8HE

Study participating centre
Medway NHS Foundation Trust
Medway Maritime Hospital
Windmill Road
Gillingham
England
ME7 5NY

Study participating centre
Barts Health NHS Trust
The Royal London Hospital
80 Newark Street
London
England
E1 2ES

Study participating centre
University Hospital of North Durham
North Road
Durham

England
DH1 5TW

Study participating centre
Guy's and St Thomas' NHS Foundation Trust
St Thomas' Hospital
Westminster Bridge Road
London
England
SE1 7EH

Study participating centre
University Hospitals Birmingham NHS Foundation Trust
Queen Elizabeth Hospital
Mindelsohn Way
Edgbaston
Birmingham
England
B15 2GW

Study participating centre
Barking Havering & Redbridge Hospitals NHS Trust
Barking Hospital
Upney Lane
Barking
England
IG11 9LX

Study participating centre
North Bristol NHS Trust
Southmead Hospital
Southmead Road
Westbury-on-trym
Bristol
England
BS10 5NB

Study participating centre
Frimley Health NHS Foundation Trust
Portsmouth Road
Frimley

Camberley
England
GU16 7UJ

Study participating centre
Royal Edinburgh Hospital
Morningside PLACE
Edinburgh
Scotland
EH10 5HF

Study participating centre
Mid Yorkshire Teaching NHS Trust
Pinderfields Hospital
Aberford Road
Wakefield
England
WF1 4DG

Study participating centre
University College London Hospitals NHS Foundation Trust
250 Euston Road
London
England
NW1 2PG

Study participating centre
University Hospitals of Leicester NHS Trust
Leicester Royal Infirmary
Infirmary Square
Leicester
England
LE1 5WW

Sponsor information

Organisation
University Hospitals Plymouth NHS Trust

ROR
https://ror.org/05x3jck08

Funder(s)

Funder type

Funder Name
Royal College of Radiologists

Alternative Name(s)
The Royal College of Radiologists, RCR

Funding Body Type
Private sector organisation

Funding Body Subtype
Associations and societies (private and public)

Location
United Kingdom

Funder Name
British Society of Interventional radiology

Alternative Name(s)
BSIR

Funding Body Type
Private sector organisation

Funding Body Subtype
Associations and societies (private and public)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file	version 1.0	26/11/2025	21/01/2026	No	No