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Comparing two ways of taking a second look during Barrett's oesophagus surveillance endoscopy

Submission date 26/11/2026	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol
Registration date 27/11/2026	**Overall study status** Completed	[_] Statistical analysis plan [_] Results
Last Edited 27/11/2026	**Condition category** Cancer	[_] Individual participant data [X] Record updated in last year

Plain English summary of protocol

Background and study aims
Barrett's oesophagus is a change in the lining of the lower food pipe, usually caused by long-term acid reflux. A small number of people with Barrett's go on to develop cancer, so they have regular camera tests (endoscopy) to look for early warning changes called dysplasia, which can be flat and hard to see. Doctors can make these changes easier to spot with blue-light imaging, a light filter built into the endoscope, or by spraying dilute acetic acid (vinegar) onto the lining. This study looked at whether it is practical to compare these two approaches as a second look after a standard examination, to help plan a larger study.

Who can participate?
Adults aged 18 years and over with Barrett's oesophagus confirmed on previous biopsies, no previous dysplasia, and booked for routine surveillance endoscopy

What does the study involve?
All participants had the same standard examination with white light and blue-light imaging. They were then randomly allocated to a second look lasting at least two minutes, either after spraying dilute acetic acid or with blue-light imaging again. Biopsies were taken from any abnormal area and in the standard surveillance pattern. A research nurse telephoned participants 14 days later to ask about any symptoms.

What are the possible benefits and risks of participating?
Participants may not benefit directly. The findings may help doctors decide how best to examine patients with Barrett's oesophagus in the future. The study added a few minutes to the endoscopy, and acetic acid can occasionally cause brief heartburn, chest discomfort or coughing. Other risks were those of the routine endoscopy and biopsies participants were already having.

Where is the study run from?
Al Adan Hospital (Kuwait)

When is the study starting and how long is it expected to run for?
April 2023 to October 2026

Who is funding the study?
Al Adan Hospital (Kuwait)

Who is the main contact?
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Contact information

Type(s)
Public, Scientific, Principal investigator

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Study information

Scientific Title
Acetic acid-assisted second inspection versus repeat blue-light imaging in Barrett's oesophagus surveillance: a single-centre randomised feasibility trial

Acronym
ACID-BLI

Study objectives
To find out whether a standardised baseline examination with high-definition white light and blue-light imaging, followed by a randomly allocated second inspection (acetic acid-assisted or repeat blue-light imaging), can be delivered and documented reliably during Barrett's oesophagus surveillance. Secondary objectives are to estimate recruitment, completeness of lesion documentation and systematic sampling, inspection time, day-14 follow-up and adverse events, and to describe how often neoplasia is first recognised during the second inspection. The study was not designed to test superiority or equivalence.

Ethics approval required

Ethics approval required

Ethics approval(s)
Approved 15/03/2023, Ministry of Health Research Committee, Kuwait (Ministry of Health, Ground Floor, Kuwait, 13001, Kuwait; +96590069869; hkhamis@moh.gov.kw), ref: MOH/REC /201120230671

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Active

Assignment
Parallel

Purpose
Diagnostic

Study type(s)

Health condition(s) or problem(s) studied
Barrett's oesophagus without previous dysplasia, undergoing endoscopic surveillance for dysplasia and early oesophageal adenocarcinoma

Interventions
All participants undergo a standardised baseline examination with high-definition white-light imaging and non-magnified blue-light imaging (BLI), with magnification of suspicious areas, using a Fujifilm EG-760Z gastroscope and ELUXEO 7000 processor under moderate sedation. Every suspicious area is photographed and mapped, and the baseline record is saved before allocation. Participants are then randomised 1:1, stratified by Prague M length (<3 cm vs ≥3 cm), using sequentially numbered, opaque, sealed envelopes prepared from an independently generated sequence.

Intervention group: 20 ml of 2.5% acetic acid is sprayed through a catheter, followed by a timed second inspection of at least 2 minutes under white light (PREDICT criteria) and then BLI with magnification where appropriate.

Control group: a timed second inspection of at least 2 minutes with repeat BLI.
Both groups then have separate biopsies of each visible lesion, recorded by the stage at which it was first seen, followed by four-quadrant biopsies every 2 cm. A research nurse masked to allocation phones each participant at day 14 (±3 days).

Intervention Type
Procedure/Surgery

Primary outcome(s)
1. Protocol-adherent examination measured using data collected on procedure records on the proportion of randomised patients in whom (1) baseline documentation was saved before allocation, (2) the allocated second inspection lasted at least 2 minutes, and (3) every biopsied lesion had an original recognition-stage entry, or an explicit entry was made that no lesion was found, at the index endoscopy

Key secondary outcome(s)
1. Second-inspection neoplasia yield measured using the proportion of patients whose first histologically confirmed neoplastic lesion (low-grade dysplasia, high-grade dysplasia or adenocarcinoma, revised Vienna classification, after expert review) was first recognised during the second inspection at the index endoscopy, with histology after expert pathology review

2. Recruitment throughout the recruitment period measured using data collected from screening logs on the proportion of eligible patients randomised, and patients randomised per month, with data collation at study end

3. Recognition-stage documentation measured using data collection from procedure records on the proportion of biopsied lesions with an original recognition-stage entry, at the index endoscopy

4. Completeness of systematic sampling measured using data collection from procedure and pathology records on the proportion of patients with all expected biopsy levels and quadrants documented, at the index endoscopy

5. Inspection duration measured using minutes for the baseline inspection, acid application, timed second inspection and total, and per cm of Prague M, timed during the procedure at the index endoscopy

6. Biopsy burden measured using data collection from procedure records on the number of lesions and tissue samples per patient, at the index endoscopy

7. Adverse events measured using data recorded during endoscopy and recovery, and by structured telephone assessment at during the procedure and recovery, and at day 14 (±3 days)

8. Follow-up completion measured using the proportion of patients with a completed day-14 telephone assessment at Day 14 (±3 days)

Completion date
13/10/2026

Eligibility

Key inclusion criteria
1. Adults aged 18 years or older booked for Barrett's oesophagus surveillance endoscopy
2. Intestinal metaplasia confirmed on previous histology
3. No previous dysplasia
4. Prague maximum extent (M) of at least 1 cm

Healthy volunteers allowed

No

Age group
Mixed

Lower age limit
18 Years

Upper age limit
85 Years

Sex
All

Total final enrolment
140

Key exclusion criteria
1. Known dysplasia or oesophageal adenocarcinoma
2. Previous endoscopic eradication therapy or oesophageal surgery
3. Referral for assessment of a known lesion
4. Contraindication to biopsy
5. Acetic acid intolerance
6. Pregnancy
7. Previous enrolment in this study

Date of first enrolment
03/04/2023

Date of final enrolment
30/09/2026

Locations

Countries of recruitment
Kuwait

Sponsor information

Organisation
Adan Hospital

ROR
https://ror.org/01mtpwn71

Funder(s)

Funder type

Funder Name
Al Adan Hospital

Results and Publications

Individual participant data (IPD) sharing plan
De-identified individual participant data will be available from the principal investigator (dralshattiy@gmail.com) on reasonable request after publication, for research purposes and subject to approval by the Kuwait Ministry of Health.

IPD sharing plan summary
Available on request