Dye chromoENDOscopy versus virtual chromoendoscopy for assessment of the ileo-anal pouch in patients with familial adenomatous POLyposis: a randomized controlled trial

Published: 21-08-2023 Last updated: 30-01-2025

The primary outcome of this study is the detection of clinical relevant adenomas (>= 5mm) in the ileal pouch.

Ethical review Approved WMO **Status** Recruiting

Health condition type Gastrointestinal tract disorders congenital

Study type Interventional

Summary

ID

NL-OMON53246

Source

ToetsingOnline

Brief title

ENDOPOL

Condition

- · Gastrointestinal tract disorders congenital
- Malignant and unspecified neoplasms gastrointestinal NEC
- Gastrointestinal neoplasms benign

Synonym

Familial adenomatous polyposis (FAP), heriditary colon cancer

Research involving

Human

Sponsors and support

Primary sponsor: Amsterdam UMC

Source(s) of monetary or material Support: KWF

Intervention

Keyword: Adenoma, Chromoendoscopy (dye or virtual), FAP, Pouch

Outcome measures

Primary outcome

The primary outcome of this study is the detection of clinical relevant adenomas (>= 5mm) in the ileal pouch.

Secondary outcome

Secondary outcomes include:

- Detection of advanced neoplasia in the ileal pouch, defined by advanced adenoma (>=10mm and/or and adenoma with high-grade dysplasia) or cancer.
- Detection of adenomas 1-4mm, 5-9mm and >=10mm both in the pouch body and rectal remnant with WLE, NBI and dye-based chromoendoscopy
- Number of performed polypectomies
- Chosen interval for next surveillance endoscopy
- Insight Polyposis Staging System (IPSS) score (10)
- Duration of examination
- Incidence of endoscopy-related complications

Study description

Background summary

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Familial adenomatous polyposis (FAP) is an inherited gastrointestinal disorder in which patients develop extensive polyps in the colon that, if left untreated, lead to colon cancer. As a preventive measure, patients are endoscopically monitored and the colon is typically removed before the age of 25. This operation can be performed with the possibility of either rectum preservation via ileorectal/ileosigmoidal anastomisis or a pouch procedure. However, polyps can still form in the pouch, remaining rectum, and upper gastrointestinal tract after the operation.

Various modalities are utilized to surveil these patients, including high-definition endoscopy, virtual chromoendoscopy, and dye chromoendoscopy. While both virtual and dye chromoendoscopy have been proven effective in detecting polyps, guidelines currently lack recommendations regarding the preference for a particular modality, and some centers utilize both modalities.

This study aims to examine the difference in adenoma detection through the use of these modalities. Adenomas can develop in the pouch, with the incidence of cancer in the pouch being described as 1-2%. Optimizing endoscopic surveillance techniques in FAP patients is crucial to 1) prevent the development of cancer and 2) avoid the need for a pouch excision.

Study objective

The primary outcome of this study is the detection of clinical relevant adenomas (>= 5mm) in the ileal pouch.

Study design

This study is designed as an international multi-center randomized controlled trial with an estimated duration of 2 years. Patients will undergo their scheduled regular surveillance pouchoscopy, performed by endoscopists with experience with FAP. Prior to the endoscopy, patients will be randomly assigned to undergo pouchoscopy with dye-based chromoendoscopy or with NBI/BLI (virtuel chromoendoscopy). After diagnostic assessment, adenomas with an indication for endoscopic intervention will be removed.

Intervention

Both interventions are standard care for detecting adenomas.

- 1. Virtual chromoendoscopy
- 2. Dye chromoendoscopy

Study burden and risks

Both interventions are standard care, and pouchoscopies are not scheduled more

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frequently than previously agreed upon for the surveillance of FAP patients.

The standard risks of pouch endoscopy will be considered similar to the risks of colonoscopy:

Gastrointestinal risks:

- Perforation occurs in 4 per 10,000 endoscopies
- Bleeding at biopsy or polypectomy site. A major haemorrhage occurs in 8 per 10,000

Non-gastrointestinal risks

- Sedation-related change in breathing, heart rate and blood pressure
- Pulmonary, cardiovascular, and cerebrovascular complications are rare and are associated with an older age and increasing comorbidity

Contacts

Public

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

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Elderly (65 years and older)

Inclusion criteria

Diagnosis of FAP

- Genetic diagnosis: proven APC germline mutation
- Clinical diagnosis: >100 colorectal adenomas in combination with a positive family history of FAP

Have an ileal-pouch anal anastomosis (IPAA)

- After primary proctocolectomy or
- secondary protectomy after initial colectomy with ileorectal or ileosigmoidal anastomosis (IRA/ISA)

Age >= 18 years.

Exclusion criteria

Allergy to indigo carmine (fluid which is used with dye chromoendoscopy). Patients who are unwilling or unable to give informed consent.

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Diagnostic

Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 10-01-2024

Enrollment: 150

Type: Actual

Ethics review

Approved WMO

Date: 21-08-2023

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 06-12-2023

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 30-09-2024

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 14-01-2025

Application type: Amendment

Review commission: METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

CCMO NL84073.018.23