# Precancerous abnormalities in patients with diverticular disease

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With this study we want to investigate the possible correlation between pre malignant abnormalities in the colon and inflamation of the colonic mucosa in patients with long lasting (more than 8 years) diverticular disease. Patients included will...

**Ethical review** Approved WMO **Status** Will not start

**Health condition type** Diverticular disorders **Study type** Observational invasive

# **Summary**

## ID

**NL-OMON38599** 

#### Source

**ToetsingOnline** 

#### **Brief title**

Precancerous abnormalities in diverticular disease

## **Condition**

Diverticular disorders

#### **Synonym**

Diverticular disease, diverticulitis and diverticulosis

## Research involving

Human

# **Sponsors and support**

**Primary sponsor:** Vrije Universiteit Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

## Intervention

Keyword: Colon, Diverticulitis, Diverticulosis, Precancerous

## **Outcome measures**

## **Primary outcome**

This study aims to evaluate the possible interaction between chronic inflammation and precancerous lesions in diverticular disease.

## **Secondary outcome**

Secondary Objectives:

Semi-quantitative scoring for

- \* Dysplasia
- o No dysplasie
- o Indefinite for dysplasia
- o Low grade dysplasia
- o High grade dysplasia
- \* Inflammation (active and chronic)
- o 0 = normal looking (round nuclei) infiltrate of the lamina propria, with a cell distribution gradient towards basal
- o 1= loss of gradient (because more cells are located basely)
- o 2 = loss of gradient and presence of neutrophil granulocytes
- o 3 = loss of gradient and ulceration in combination with/or presence of crypt abscesses

- \* Apoptosis
- o 0 = 0 or 1 apoptotic cell per biopsy
- o 1 = more than 1 apoptotic cell per biopsy
- \* Fibrosis
- 0.0 = no fibrosis
- o 1 = presence of fibroses

Using immunohistochemical staining, cases indefinite for dysplasia will be evaluated by

- \* MIB1
- \* P53

# **Study description**

## **Background summary**

The available literature regading the influence of chronic diverticular disease on the colonmucosa is not ambigious. These are some studies stating to have found increased rates of (pre) malignant abnormalies in patietns with chronic diverticular disease.

Chronic inflammation can seriously effect the quality of the colonic mucosa. Long term inflammation in the colon is known to influence normal cellular structure in a negative way. Which coul ultimately lead to the presence of high grade dysplasia and colorectal cancer.

The possible sequelea of chronic inflammation in patients with inflammatoire bowel disease are well recorded. As patients with Crohns disease and/or Colitis Ulcerosa are screened for the presence of colorectal carcinoma. The guidelines state that specialists should commence screening an average 8 years after diagnosis has been made, depending on disease activity.

## Study objective

With this study we want to investigate the possible correlation between pre malignant abnormalities in the colon and inflamation of the colonic mucosa in patients with long lasting (more than 8 years) diverticular disease.

Patients included will undergo sigmoidoscopy or colonoscopy and bioptes will be taken from three portions of the end of the colon. These biopties will be scored by two independents skilled patholog

We hypothesise to find a positive correlation between severity of mucosa inflammation and grade of colonic mucosa dysplasia. When such a correlation is found more research regarding this subject is neccesary.

## Study design

After H&E staining, semi-quantitative scoring for dysplasia, inflammation (active and chronic), apoptosis and fibrosis is performed. Cases indefinite for dysplasia will be evaluated by MIB1 and p53

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## Study burden and risks

Very slightly increased risk of a perforation of the colon.

In patients with long lasting diverticulitis an increased chance of developing (pre)cancerous lesions could be present. Histological evaluation of tissue from a site in chronic inflammation could show us if the risk of malignant transformation is increased in these patients.

# **Contacts**

#### **Public**

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#### Scientific

Vrije Universiteit Medisch Centrum

4 - Precancerous abnormalities in patients with diverticular disease 7-05-2025

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# **Trial sites**

# **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adults (18-64 years) Elderly (65 years and older)

# **Inclusion criteria**

Informed consent (IC)
Patients undergoing a colonoscopy/sigmoidoscopy

## **Exclusion criteria**

Refusal of participation Inflammatory bowel disease A medical history of colorectal cancer or pre-maligmant polyp(s) Previous surgery of the colon History of familial colon cancer

# Study design

# **Design**

Study type: Observational invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Will not start

Enrollment: 42

Type: Anticipated

# **Ethics review**

Approved WMO

Date: 30-10-2013

Application type: First submission

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 NL44351.029.13