

Familial Barrett's Esophagus

Gepubliceerd: 04-06-2014 Laatste bijgewerkt: 07-12-2022

Our overall hypothesis is that BE and/or GEJ adenocarcinoma in individuals of families that meet criteria of familial BE or adenocarcinoma of the GEJ, has a genetic basis.

Ethische beoordeling	Niet van toepassing
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON22205

Bron

NTR

Verkorte titel

IFAMBAR study

Aandoening

Barrett's Esophagus

Genetics

Esophageal Adenocarcinoma

Ondersteuning

Primaire sponsor: University Medical Center Utrecht

Overige ondersteuning: None

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Determine the prevalence of BE among first degree relatives of index patients of families that fulfil criteria for familial BE/adenocarcinoma of the GEJ

Determine the number and type of (pre) malignant lesions in first degree relatives of index patients of families that fulfil criteria for familial BE/adenocarcinoma of the GEJ

Toelichting onderzoek

Achtergrond van het onderzoek

SUMMARY

Rationale:

Worldwide esophageal cancer is a significant and an increasing health problem. In 2005, there were 497,700 new cases, and the prevalence is expected to increase by approximately 140% by 2025 (1). Esophageal adenocarcinoma (EAC) account for most cases of esophageal cancer in the Western world. The mean age of onset is about 60 years. Most esophageal adenocarcinomas arise at the gastro-esophageal junction (GEJ) and are thought to arise from Barrett's epithelium, which is characterized by columnar metaplasia with intestinal differentiation that has replaced the normal squamous cell lining of the esophagus. Environmental factors as gastro-esophageal reflux disease (GERD) and smoking contribute to chronic inflammation, which promotes the transition from normal squamous cell epithelium towards Barrett's epithelium and ultimately leads to adenocarcinoma. Circumstantial evidence on the role of genetics is provided by familial clustering of BE and adenocarcinoma of the GEJ in certain families. Identifying these families could be useful to study the exact phenotype of hereditary Barrett's esophagus (BE)/ adenocarcinoma of the GEJ and could be the key to the identification of causal gene defects that underlie this condition. In the current study we will explore the phenotype in families with multiple cases of BE and EAC which enables genetic analysis in the near future aiming at identifying putative susceptibility genes. Furthermore, it should allow (more tailored) screening recommendations for relatives at increased risk.

Objective:

- 1) To determine the prevalence of BE among first degree relatives of index patients in families that fulfil criteria for familial BE/adenocarcinoma of the GEJ
- 2) Collect tissues of the index patients and all first degree relatives (blood or formalin fixed and paraffin embedded tissue) for genetic analyses in the near future
- 3) Explore the phenotype of familial BE and adenocarcinoma of the GEJ

Study design:

Observational retrospective and prospective cohort study

Study population:

Recently, we were able to identify 20 index patients of families that meet criteria of familial BE and/or adenocarcinoma of the GEJ. These criteria were:

- A. Two or more first- or second degree relatives with BE, adenocarcinoma of the GEJ, with at least one diagnosed before the age of 50
- B. Three or more first- or second degree relatives with BE, adenocarcinoma of the GEJ, irrespective of age
- C. One patient with BE, adenocarcinoma of the GEJ < 40 yrs

All first degree relatives of these index patients, older than 25 and under 75 years old and able to fill out the "Barrett's esophagus" questionnaire, will be eligible for this study and invited for a diagnostic upper endoscopy and a venipuncture for two tubes of blood.

Primary outcome measures:

Determine the number of affected individuals (with BE and/or adenocarcinoma of the GEJ) within families that fulfil criteria for familial BE and adenocarcinoma of the GEJ. Determine the phenotype of familial Barrett's esophagus and adenocarcinoma of the GEJ (e.g. identification of other cancers seen more often in families with familial Barrett's esophagus and adenocarcinoma of the GEJ)

Nature and extent of the burden and risks associated with participation, benefit and group relatedness:

All patients will be asked to fill in a "Barrett's Esophagus" questionnaire and to donate one tube of blood (1x10ml). During venipuncture there is a very low risk of very short time period of pain (during the puncture), bleeding, hematoma and superficial phlebitis. There are no benefits for the participant.

First degree relatives that had no prior duodenoscopy or more than five years ago, will be invited for a duodenoscopy at the endoscopy unit of the department of Gastroenterology.

The risks of a duodenoscopy are low. It is common to have a sore throat and a bloated feeling after the procedure. There may be some colicky pain due to the air which is used in the procedure. Some nausea is relatively common. Major complications that occur seldom are pneumonia, upper gastrointestinal bleeding and perforation. The benefit related to participation is the possible identification of a BE, a premalignant condition, that should be followed and/or treated according standard international guidelines.

Doel van het onderzoek

Our overall hypothesis is that BE and/or GEJ adenocarcinoma in individuals of families that meet criteria of familial BE or adenocarcinoma of the GEJ, has a genetic basis.

Onderzoeksopzet

1

Onderzoeksproduct en/of interventie

Interventions:

For all participating individuals (index patients and first degree relatives)

1) Barrett's Esophagus Questionnaire

2) Venipuncture

For first degree relatives that had no prior duodenoscopy or more than five years ago, he/she will be invited for a duodenoscopy

Contactpersonen

Publiek

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Index patients of families that full fill one of the following diagnostic criteria for familial Barrett's esophagus or adenocarcinoma of the gastro-esophageal junction:

- A. Two or more first- or second degree relatives with BE or adenocarcinoma of the GEJ, with at least one diagnosed before the age of 50
- B. Three or more first- or second degree relatives with BE or adenocarcinoma of the GEJ, irrespective of age
- C. One patient with BE or adenocarcinoma of the GEJ < 40 yrs

Inclusion criteria

All first degree relatives (i.e. sons, daughters, sisters, brothers and father and mother of the index patient) of the index patient

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

A potential individual who meets any of the following criteria will be excluded from participation in this study:

- 1) Individuals < 25 and > 75 years old

2) Unable to fill out questionnaire

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-09-2014
Aantal proefpersonen:	60
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing	
Soort:	Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
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NTR-new	NL4509
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NTR-old	NTR4627
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Ander register Centrale Commissie Mensgebonden Onderzoek : ABR formulier 47860

Resultaten