Familial Barrett's Esophagus

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON22205

Source
NTR

Brief title
IFAMBAR study

Health condition

Barrett's Esophagus
Genetics
Esophageal Adenocarcinoma

Sponsors and support

Primary sponsor: University Medical Center Utrecht
Source(s) of monetary or material Support: None

Intervention

Outcome measures

Primary outcome

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

Secondary outcome

None

Study description

Background summary

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 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 selden 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.

Study objective

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.

Study design

1

Intervention

Interventions:

For all participating indivicdals (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

Contacts

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Eligibility criteria

Inclusion criteria

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

Exclusion criteria

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

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-09-2014
Enrollment:	60
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

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
NTR-new	NL4509
NTR-old	NTR4627
Other	Centrale Commissie Mensgebonden Onderzoek : ABR formulier 47860

Study results