Lymphocyte trafficking and the effect of vedolizumab in pouchitis.

Published: 17-03-2017
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To demonstrate accumulation of *4*7-positive lymphocytes in pouchitis and changes thereof after resolution of endoscopic inflammation.

Ethical review	Approved WMO
Status	Completed
Health condition type	Gastrointestinal inflammatory conditions
Study type	Observational invasive

Summary

ID

NL-OMON49464

Source
ToetsingOnline

Brief title
Lymphocyte trafficking in pouchitis

Condition

- Gastrointestinal inflammatory conditions

Synonym
Pouchitis

Research involving
Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum
Source(s) of monetary or material Support: Takeda

Intervention

Keyword: Lymphocyte trafficking, Pouchitis, Vedolizumab

Outcome measures

Primary outcome

Semi-quantitative analysis of *4*7+ T-lymphocytes in ileal pouch biopsies of chronic pouchitis patients and changes thereof after resolution of endoscopic inflammation.

Secondary outcome

- Semi-quantitative analysis of key-players of lymphocyte trafficking in pouchitis (e.g. MAdCAM-1, CCR9, CCR10, CCL25, CCL28, *E*7).

- Changes of lymphocyte subsets after treatment with vedolizumab.

- Vedolizumab serum levels in peripheral blood of patients treated with vedolizumab

Study description

Background summary

Because of medically refractory disease or colorectal neoplasia development, about 15% of ulcerative colitis (UC) patients will need a proctocolectomy with ileal-anal pouch reconstruction (IPAA). A common complication of IPAA is pouchitis, a nonspecific inflammation of the pouch, which occurs in about 50% of UC patients with IPAA. The pathogenesis of pouchitis is not well understood, but the innate and adaptive immune responses, microbiota-host interactions or defects in intestinal epithelial cells may play a role in this. Vedolizumab, a humanized monoclonal antibody that specifically binds to the lymphocyte integrin *4*7 may be beneficial for the treatment of pouchitis. However, blocking the interaction between MAdCAM-1 and *4*7 integrin on memory T and B cells by vedolizumab, which has been shown to be beneficial in IBD, hasn*t been studied in pouchitis yet.

Study objective

To demonstrate accumulation of *4*7-positive lymphocytes in pouchitis and changes thereof after resolution of endoscopic inflammation.

Study design

Prospective observational study

Study burden and risks

Currently, no drugs have been approved for the treatment or prevention of pouchitis, as well as no drugs have been proven to be beneficial in clinical trials. This may be due to the fact that the pathophysiology is yet not clear. The patients recruited for this study will have to undergo an endoscopy as per routine care or study procedure, which is an invasive procedure. With this study, we can expand the purpose of these endoscopies, by also adding a more fundamental approach to the disease and treatment. The additive burden consists of 6 or 12 additional biopsies (10/5 pts resp.), 1 or 2 faeces samples (10/5 pts) and one or two extra blood samples (10/5 pts).

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

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

Inclusion criteria

Group 1:
- The subject has a history of ileal pouch anal anastomosis (IPAA) for Ulcerative Colitis completed at least 3 months prior to screening.
- The patient is scheduled for a surveillance or diagnostic endoscopy of the pouch
- Age from 18 years, either male or female
- Ability to give informed consent;Group 2 and 3:
- The subject has a history of ileal pouch anal anastomosis (IPAA) for Ulcerative Colitis completed at least 3 months prior to screening
- Age from 18 years, either male or female
- Ability to give informed consent
- The subject has chronic or recurrent pouchitis and may have antibiotic-dependent or antibiotic-refractory chronic pouchitis

Exclusion criteria

Group 1:
- The subject has an IPAA that is less than 3 months old.
- The subject has a history of a perforation of the intestine after endoscopy or surgery
- The subject currently has acute or chronic pouchitis, or had pouchitis in the past 3 months.
- The subject had prior exposure to vedolizumab, natalizumab, efalizumab, rituximab, etrolizumab or anti-MAdCAM-1 therapy in the past 6 months.
- Inability to give informed consent
- The patient has Crohn's disease. ;Group 2 and 3:
- The subject has an IPAA that is less than 3 months old.
- The subject currently uses or has prior exposure to vedolizumab, natalizumab, efalizumab, rituximab, etrolizumab or anti-MAdCAM-1 therapy in the past 6 months.
- The subject has a history of a perforation of the intestine after endoscopy or surgery
- Inability to give informed consent
- The patient has Crohn's disease

Study design

Design

Study type: Observational invasive
Masking: Open (masking not used)

Control:	Uncontrolled
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Completed
Start date (anticipated):	31-07-2017
Enrollment:	30
Type:	Actual

Ethics review

Approved WMO

Date:	17-03-2017
Application type:	First submission
Review commission:	METC Amsterdam UMC

Approved WMO

Date:	02-10-2018
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

ID: 24429
Source: Nationaal Trial Register
Title:

In other registers

Register	ID
CCMO	NL60196.018.16
OMON	NL-OMON24429