FARAH study Fecal trAnsplantation to Reduce therapy-refractory graft versus host disease in Allogeneic Hematopoietic stem cell transplantation

Published: 07-07-2016
Last updated: 19-04-2024

Allogeneic hematopoietic stem cell transplantation is often complicated by graft versus host disease (GvHD) causing high morbidity and mortality. Loss of gutmicrobial diversity is a risk factor to develop GvHD. We will test the hypothesis that...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Malignant and unspecified neoplasms gastrointestinal NEC
Study type	Interventional

Summary

ID

NL-OMON44039

Source
ToetsingOnline

Brief title
FARAH

Condition

- Malignant and unspecified neoplasms gastrointestinal NEC
- Immune disorders NEC

Synonym
graft versus host, intestine

Research involving
Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W,AMC Foundation

Intervention

Keyword: -allogeneic hematopoietic stem cell transplantation, -fecal transplant, -graft versus host disease, -gutmicrobiota

Outcome measures

Primary outcome

The goal and primary endpoint is reduction of GVHD (clinically and biopsy proven) in relation to a change in fecal microbiota composition at 1 and 4 weeks, 3 and 6 months after fecal transplant.

Secondary outcome

Total number and severity of infections (morbidity) , total duration of hospital stay and readmissions will be and changes in biochemical and inflammatory markers in plasma and affected tissue after fecal transplant at above mentioned time points are secondary endpoints

Study description

Background summary

Allogeneic hematopoietic stem cell transplantation is often necessary to prevent disease relapse in patients with hematologic malignancies such as leukemia or lymphoma. The goal of the precedure is to elecit a graft-versus-tumor response to prevent relapse of the malignancy. This procedure is performed several hundred times per year in the Netherlands, but there is a large mortality and moribidity risk, of which graft-versus-host disease is the most developed. About 70% of allogeneic HSCT recipients develop some form of GvHD. In particular severe GvHD of the intestine has a high mortality risk (50% for the whole group, with a 2 year survival for therapy-refractory GvHD patients of <20%) Recently the intestinal microbiota

has gained interest as drivers of the pathophysiology of both hematological (GVHD) and autoimmune disease such as Crohn's disease and ulcerative colitis. Recent studies have suggested that fecal transplantation (using feces from healthy donors) can affect disease state of IBD patients and animal data have suggested that the same holds true for GVH disease. We therefore postulate that fecal transplantatie can have beneficial effects on intestinal GVH in patients that received allogenic stem cell transplantation.

Study objective

Allogeneic hematopoietic stem cell transplantation is often complicated by graft versus host disease (GvHD) causing high morbidity and mortality. Loss of gutmicrobial diversity is a risk factor to develop GvHD. We will test the hypothesis that restitution of normal microbial diversity by fecal microbiota transplantation may cure therapy-refractory gastro-intestinal GvHD.

Study design

single center, single arm, non-randomized intervention trial

Intervention

fecal transplantation from healthy screened donors

Study burden and risks

In theory there is a risk of transferring infectious diseases (in line with bloodtransfusion), however due to thorough screening of fecal donors (together with prof Nieuwdorp) this risk will be minimized. Signoid biopsies will be taken under local anesthesia and has no great risks in this patient group. As fecal transplant was safe in > 400 patients at AMC including other immunocompromised patients (kidney transplant patients) , we believe that the gained insight in the pathophysiology of and potential treatment of intestinal GVH with healthy donor feces or specific bacterial strains will outweight the potential side effects such as infection/sepsis (that can be treated with antibiotics if necessary).

Contacts

Public
Academisch Medisch Centrum

Meibergdreef 9
Amsterdam 1105 AZ

NL
Scientific
Academisch Medisch Centrum

Meibergdreef 9
Amsterdam 1105 AZ
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

- Male and female
- > 18 years of age
- allogeneic HSCT recipients
- non critically ill
- steroid- and mesenchymal stromal therapy resistant intestinal GvHD (biopsy proven)

Exclusion criteria

- unable to sign informed consent

Study design

Design

Study type: Interventional

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	07-07-2016
Enrollment:	15
Type:	Actual

Ethics review

Approved WMO Date:	07-07-2016
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	20-03-2017
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	NL55067.018.15