# Effect of addition of elemental nutrition to an elimination diet on esophageal inflammation in adult eosinophilic esophagitis (EoE) patients: A randomized controlled trial

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To evaluate whether the addition of amino-acid based nutrition to FFED is superior to FFED alone in terms of improvement of the esophageal eosinophilic inflammation, and improved patients' adherence and acceptability of the diet. Secondary, it will...

Ethische beoordeling Positief advies

**Status** Werving nog niet gestart

Type aandoening -

Onderzoekstype Interventie onderzoek

# **Samenvatting**

#### ID

NL-OMON24372

#### **Bron**

NTR

#### Verkorte titel

Supplemental Elemental trial (SET)

#### **Aandoening**

Eosinophilic oesofagitis Elimination diet Elemental supplement Esophageal inflammation

In het Nederlands Eosinofiele oesofagitis Eliminatie dieet Elementair supplement Oesofagiale inflammatie

#### **Ondersteuning**

Primaire sponsor: Academic Medical Center (AMC) Amsterdam. Dept. Gastroenterology &

Hepatology

Overige ondersteuning: Nutricia Research

#### Onderzoeksproduct en/of interventie

#### **Uitkomstmaten**

#### Primaire uitkomstmaten

Change in peak eosinophil count, measured as maxi mum number of eosinophils per HPF. Response is defined as complete if the

reduction of absolute number of eosinophils per HPF is decreased to <10 eosinophils/HPF. Esophageal mucosal eosinophil

infiltration is considered the most important marker of disease activity and is primary endpoint in all major therapeutic studies. These

biopsies are taken at mid and proximal esophageal level during upper endoscopy.

# **Toelichting onderzoek**

#### Achtergrond van het onderzoek

Rationale: There is sufficient evidence to state that food allergy plays an important role in eosinophilic esophagitis (EoE), and dietary treatment has proven efficacy in these patients. Elimination diets and elemental nutrition with amino acid-based formula are effective but both also have limitations. Combination of elimination diets with amino acid-based nutrition might improve adherence, prevent weight loss and increase the feasibility of the elimination diet. Furthermore, there is data suggesting that amino acid-based nutrition has anti-inflammatory effects itself, aside from the removal of all disease triggering food allergens. We hypothesize that the addition of amino acid-based nutrition to a four food elimination diet (FFED) is more effective than a FFED alone due to the: (1) anti-inflammatory effect of the amino acids and (2) increased feasibility of allergen avoidance.

Objectives: Primary: To evaluate whether, in adult EoE patients, the addition of an elemental (amino acid-based) nutrition to the FFED is more effective in decreasing the esophageal eosinophilic inflammation and increasing the dietary acceptability and patients' adherence than a FFED alone.

Study design: Prospective randomized controlled trial

Study population: Adult EoE patients with proven active disease (>15 eosinophils per high

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power field (HPF))

Intervention: EoE patients are treated with a FFED alone or with a FFED with addition of amino acid-based nutrition for 6 weeks. Baseline upper endoscopy is performed and esophageal biopsies are taken for histological and transcriptional analyses before and after 6 weeks diet. Diet acceptability and adherence, symptoms and quality of life are being investigated using questionnaires. Body Mass Index (BMI) is calculated and all measurements are repeated after 6 weeks of dietary treatment.

Main study parameters/endpoints: Reduction of esophageal eosinophilic inflammation with FFED compared with FFED with addition of elemental (amino acid-based) nutrition. Secondary endpoints are acceptability of the treatment, quality of life and symptoms.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Following an elimination diet can be a burden for adults. The risk of the performed procedures consists of the very small risk of biopsies, namely bleeding and perforation. The study will evaluate the effectiveness of a new dietary approach in EoE and contribute to better understanding of this condition.

#### Doel van het onderzoek

To evaluate whether the addition of amino-acid based nutrition to FFED is superior to FFED alone in terms of improvement of the esophageal eosinophilic inflammation, and improved patients' adherence and acceptability of the diet. Secondary, it will be important to study the effect of additional amino acid-based nutrition on symptoms as measured by patient reported outcomes, weight loss prevention and quality of life. In both arms the efficacy of the intervention will be controlled for the total composition of the diet.

#### **Onderzoeksopzet**

12 months

#### Onderzoeksproduct en/of interventie

FFED v.s. FFES with addition of elemental nutrition

# Contactpersonen

#### **Publiek**

Dept. Gastroenterology & Hepatology | Room C2-310, Academic Medical Center (AMC)

W.E. Rooij, de Meibergdreef 9

Amsterdam 1105 AZ The Netherlands +31(0)20-5668091

#### Wetenschappelijk

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W.E. Rooij, de Meibergdreef 9

Amsterdam 1105 AZ The Netherlands +31(0)20-5668091

## **Deelname** eisen

# Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Active EoE at baseline i.e. presence of >15 eosinophilic granulocytes per high power field (HPF) in mid or proximal esophageal biopsies before the start of any therapy
- Currently experiencing dysphagia
- Written informed consent

# Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Inability to stop topical corticosteroids
- Use of systemic corticosteroids, leuko triene inhibitors, or monoclonal antibodies, in the month preceding the study
- Use of anticoagulants at study entry
- Recent history of GI cancer
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- History of major GI tract sur gery
- ASA class IV or V

# **Onderzoeksopzet**

### **Opzet**

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: Gerandomiseerd

Blindering: Open / niet geblindeerd

Controle: Geneesmiddel

#### **Deelname**

Nederland

Status: Werving nog niet gestart

(Verwachte) startdatum: 01-12-2017

Aantal proefpersonen: 40

Type: Verwachte startdatum

# **Ethische beoordeling**

Positief advies

Datum: 20-10-2017

Soort: Eerste indiening

# **Registraties**

## Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 48882

Bron: ToetsingOnline

Titel:

# Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

# In overige registers

Register ID

NTR-new NL6014 NTR-old NTR6778

CCMO NL62715.018.17 OMON NL-OMON48882

# Resultaten