The dopaminergic system in patients with functional dyspepsia analyzed by an alphamethyl-para-tyrosine (AMPT) challenge test and single photon emission computed tomography (SPECT) imaging before and after treatment with amitriptyline

Submission date	Recruitment status	Prospectively registered
07/06/2006	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
07/06/2006	Completed	Results
Last Edited	Condition category	Individual participant data
07/09/2011	Digestive System	Record updated in last year

Plain English summary of protocolNot provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Study objectives

Patients (stress-sensitive) with functional dyspepsia have a change in their dopaminergic system, through chronic stress, which leads to visceral hypersensitivity and therefore dyspeptic symptoms.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Non-randomized, placebo-controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Functional dyspepsia (FD)

Interventions

- 1. Amitriptyline or placebo for the patient group (see the amitriptyline study)
- 2. Single photon emission computed tomography (SPECT) imaging with radioligand (123I) iodobenzamide ([123I]IBZM)
- 3. Alpha-methyl-paratyrosine (AMPT/metyrosine) challenge test; 2 x 500 mg

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Amitriptyline

Primary outcome(s)

To evaluate if patients with functional dyspepsia have a change in their dopaminergic system that leads to visceral hypersensitivity

Key secondary outcome(s))

Has amitriptyline a positive effect on those changes in the dopaminergic system through reducing the stress?

Completion date

01/05/2009

Eligibility

Key inclusion criteria

- 1. Age 18-65 years
- 2. Functional dyspepsia (Nepean dyspepsia index [NDI] >25)
- 3. Take part in the amitriptyline study (ISRCTN76116512)
- 4. No effect on proton pump inhibitor (PPI), or a constant three-month dosage of PPI
- 5. No depression (Zung self-rating depression scale <50)
- 6. No medications which influence the intestine

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Upper age limit

65 years

Sex

All

Key exclusion criteria

- 1. Gastroduodenal surgery
- 2. Reflux-like dyspepsia (Rome II criteria)
- 3. Use of antidepressants
- 4. Organic abnormalities
- 5. Pregnancy
- 6. Severe cardiac, renal, pulmonary, hepatic or systemic diseases, hyperthyroidism, glaucoma and epilepsy
- 7. Metal implants

Date of first enrolment

01/05/2006

Date of final enrolment

01/05/2009

Locations

Countries of recruitment

Netherlands

1100 DD

Study participating centre Academic Medical Center (AMC) Amsterdam Netherlands

Sponsor information

Organisation

Academic Medical Center (AMC), Department of Gastroenterology (The Netherlands)

ROR

https://ror.org/03t4gr691

Funder(s)

Funder type

University/education

Funder Name

Academic Medical Center (AMC)

Alternative Name(s)

Academic Medical Center, AMC

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

Netherlands

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summaryNot provided at time of registration