Efficacy of balloon Eustachian tuboplasty

Submission date 21/11/2017	Recruitment status No longer recruiting	[X] Prospectively registered [_] Protocol
Registration date 23/11/2017	Overall study status Completed	 Statistical analysis plan Results
Last Edited 14/11/2022	Condition category Ear, Nose and Throat	 Individual participant data Record updated in last year

Plain English summary of protocol

Background and study aims

Secretory otitis media is an ear condition where fluid accumulates behind the eardrum and remains there after an ear infection or blockage of the eustachian tube that drains fluid from the ears. Balloon Eustachian tuboplasty (BET) is a potential treatment option where a balloon is inserted into the Eustachian tube, inflated, then withdrawn. About 70-80% of adult patients seem to benefit from BET, at least briefly. Strong evidence of its long-term effectiveness is required. The aim of this study is to assess the effectiveness of BET in patients withlong-term Eustachian tube dysfunction.

Who can participate? Patients with persistent secretory otitis media or Eustachian tube dysfunction

What does the study involve?

Participants are randomly allocated to be treated with either BET or sham surgery under local anaesthetic. Ear examinations are carried out 3 and 12 months after the operation.

What are the possible benefits and risks of participating?

There may be no direct benefit for the patient but the information revealed from this study will help improve the treatment of people with ETD. There are no known severe risks associated with BET.

Where is the study run from?

- 1. Helsinki University Hospital (Finland)
- 2. Tampere University Hospital (Finland)
- 3. Turku University Central Hospital (Finland)

When is the study starting and how long is it expected to run for? January 2017 to May 2022

Who is funding the study?

- 1. State funding for university level health research (Finland)
- 2. Research Foundation for ENT Disorders (Finland)

Who is the main contact? Dr Saku Sinkkonen

Contact information

Type(s) Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers §97/2017

Study information

Scientific Title

Efficacy of balloon Eustachian tuboplasty - prospective, blinded and placebo-controlled multicentre study

Acronym EBET

Study objectives

Balloon Eustachian tuboplasty (BET) offers benefit to patients with persistent secretory otitis media, severe symptoms of Eustachian tube dysfunction (ETD) or baro-challenged ETD.

Ethics approval required Old ethics approval format

Ethics approval(s)

Tampere University Hospital Ethics Committee, 02/05/2017, ref: R17040

Study design

Prospective blinded placebo-controlled multi-centre study

Primary study design Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Persistent secretory otitis media, severe symptoms of ETD or baro-challenged ETD

Interventions

Parallel-group randomisation is made after local anaesthesia induction before the operation. Patients are treated with either BET or sham surgery under local anaesthesia. The patients are blinded to the procedure. Postoperative controls are arranged 3 and 12 months after operation in a blinded manner by a physician not given the treatment.

Intervention Type

Procedure/Surgery

Primary outcome measure

Measured at baseline, 3 months and 1 year:

- 1. Valsalva maneuver based on physicians descriptive findings
- 2. Otomicroscopy based on physicians descriptive findings
- 3. Tympanometry results classified as A, B and C type outcomes
- 4. Tubomanometry results based on the Eustachian tube opening and opening latency index

5. Need for grommets

Secondary outcome measures

Quality of life measured with disease specific questionnaire ETDQ7 at baseline, 3 months and 1 year

Overall study start date

26/01/2017

Completion date 31/05/2022

Eligibility

Key inclusion criteria

All patients in this study suffer from dilatory Eustachian tube dysfunction and are deemed suitable for BET. Possible indications are:

1. Persistent secretory otitis media

2. Severe symptoms of ETD

3. Baro-challenged ETD

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

165 (55 patients in each indication group)

Key exclusion criteria

- 1. The occurrence of cleft palate in any form
- 2. Current ventilating grommet
- 3. Tympanic membrane perforation
- 4. Adhesive otitis
- 5. Cholesteatoma
- 6. Cystic fibrosis
- 7. Immotile cilia syndrome
- 8. Untreated nasal polyposis
- 9. Samter's triade
- 10. Untreated gastroesophageal reflux disease
- 11. Other mechanical obstruction in nasopharynx

Date of first enrolment

27/11/2017

Date of final enrolment

31/12/2020

Locations

Countries of recruitment Finland

Study participating centre Helsinki University Hospital Surgical Hospital, Kasarmikatu 11-13 Helsinki Finland 00029

Study participating centre Turku University Central Hospital Kiinamyllynkatu 4–8 Turku Finland 20521

Study participating centre Tampere University Hospital Teiskontie 35 Tampere Finland 33521

Sponsor information

Organisation Helsinki University Hospital

Sponsor details Kasarmikatu 11-13 Helsinki Finland 00029

Sponsor type Hospital/treatment centre

ROR https://ror.org/02e8hzf44

Funder(s)

Funder type Government

Funder Name State funding for University level health research

Funder Name Research Foundation for ENT Disorders

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal. Study protocol, statistical analysis plan, informed consent form, clinical study report and analytic code will be available immediately following publication.

Intention to publish date

31/12/2023

Individual participant data (IPD) sharing plan

The datasets generated and/or analysed during the current study during this study will be included in the subsequent results publication.

IPD sharing plan summary

Other