

# Vestibulotoxicity in consequence of tobramycin therapy in cystic fibrosis patients

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Primary objective: to investigate the prevalence of vestibulotoxicity and disturbance of equilibrium as far as Cystic Fibrosis patients with at least one treatment with tobramycin are concerned. Secondary objective: To formulate an advice for...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruiting
<b>Health condition type</b>	Inner ear and VIIIth cranial nerve disorders
<b>Study type</b>	Observational invasive

## Summary

### ID

NL-OMON29992

### Source

ToetsingOnline

### Brief title

vestibulotoxicity in cystic fibrosis patients

### Condition

- Inner ear and VIIIth cranial nerve disorders

### Synonym

damage of the inner ear, disturbance of equilibrium

### Research involving

Human

### Sponsors and support

**Primary sponsor:** HagaZiekenhuis

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** aminoglycoside, cystic fibrosis, tobramycin, vestibulotoxicity

## Outcome measures

### Primary outcome

Primary study parameter is formulated as whether there is damage to the vestibulum or there is not.

### Secondary outcome

Secondary study parameter is formulated as whether there is disturbance of equilibrium due to damage of the vestibulum or there is not.

## Study description

### Background summary

Most of the CF patients were treated with repeated therapies of tobramycine. Known and described are the cochleo-, vestibulo- and nephrotoxicity of aminoglycoside, of which cochleotoxicity is familiar in clinical practice. CF patients, like other patients with repeated therapy with aminoglycoside, are being screened by pure tone audiometry. Research concerning vestibulotoxicity in vivo, particularly in humans, is not established yet, with the exception of some case reports.

This study is purposed to investigate the vestibulotoxicity due to aminoglycoside with a clinical approach. Because CF patients are repeatedly treated with aminoglycosides as well as frequently screened for hearing loss, they form an interesting research population.

Our hypothesis is that CF patients with repeated tobramycin therapy do have an elevated risk on vestibulotoxicity, and, therefore, has to be screened on vestibular function in addition to screening for cochleotoxicity

### Study objective

Primary objective:

to investigate the prevalence of vestibulotoxicity and disturbance of equilibrium as far a Cystic Fibrosis patients with at least one treatment with tobramycin are concerned.

Secondary objective:

To formulate an advice for possible screening for vestibulotoxicity with Cystic Fibrosis patients with at least one treatment with tobramycin are concerned.

## Study design

Observational cohort study

## Study burden and risks

The burden associated with participation is concerned with an ENG investigation (45 min.).

Preceding, the patient is asked to complete a questionnaire (5 min.) and the patient will be seen by an independent ENT doctor. This doctor will have a look using the microscope to exclude patients with perforation in the tympanic membrane and will do a ordinary physical examination as far as the equilibrium is concerned (10 min.).

All investigations are minimal invasive and none of them can harm the patient.

## Contacts

### Public

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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

cystic fibrosis patients currently known in the Haga hospital who have been treated at least one time with intravenous tobramycin and with an audiogram in medical dossier

### Exclusion criteria

patients treated with other intravenous aminoglycoside therapy than tobramycin

patients receiving intravenous aminoglycosides during investigation.

patients with perforation of one of the tympanic membranes.

patients with a radical cave.

## Study design

### Design

Study phase:	4
Study type:	Observational invasive
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Diagnostic

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-11-2006
Enrollment:	40
Type:	Actual

## Ethics review

Approved WMO

Date: 30-10-2006

Application type: First submission

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

## 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	NL13333.098.06