

# Occipital nerve stimulation: Real-world long-term clinical follow up in medically intractable cluster headache

Published: 14-06-2021

Last updated: 08-04-2024

Primary Objective: To assess real-world long-term efficacy and tolerability of occipital nerve stimulation (ONS) in medically intractable chronic cluster headache patients Secondary Objectives: - To obtain real world data of effect of ONS on quality...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruiting
<b>Health condition type</b>	Other condition
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON51040

### Source

ToetsingOnline

### Brief title

Long term follow-up of ONS in MICCH

### Condition

- Other condition
- Headaches

### Synonym

Hortons neuralgia, neuralgia of Horton

### Health condition

Hoofdpijn/chronische pijn

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Leids Universitair Medisch Centrum

**Source(s) of monetary or material Support:** NVT

## Intervention

**Keyword:** neuromodulation, neurostimulation, occipital nerve, ONS

## Outcome measures

### Primary outcome

Average number of weekly attacks 1, 2 and 5 years after ONS implantation  
compared to baseline

### Secondary outcome

- Average score on the SF-36 and HADS 1, 2 and 5 years after ONS implantation  
compared to baseline
- Average attack intensity 1,2 and 5 years after ONS implantation compared to  
baseline
- Use of prophylactic medication 1,2 and 5 years after ONS implantation  
compared to baseline
- Average weekly use of attack medication and oxygen 1,2 and 5 years after ONS  
implantation compared to baseline
- Side effects
- Number of revisions and battery replacements necessary
- Drop-out during the 5 years study period

## Study description

### Background summary

Occipital nerve stimulation (ONS) is a relatively new, invasive, reversible preventive treatment for medically intractable chronic cluster headache (MICCH) and has recently been approved for reimbursement by the Dutch health authority. This approval was based on the preliminary positive results of the \*occipital nerve stimulation in medically intractable chronic cluster headache\* (ICON) trial that investigated a high vs low stimulation protocol. Since ONS is a relatively new treatment method, real life clinical follow up data to determine effect and tolerability is warranted. Furthermore, this data can be used to identify possible factors predicting effect.

## **Study objective**

Primary Objective:

To assess real-world long-term efficacy and tolerability of occipital nerve stimulation (ONS) in medically intractable chronic cluster headache patients

Secondary Objectives:

- To obtain real world data of effect of ONS on quality of life
- To obtain real world data of effect of ONS on anxiety and depression
- To identify possible factors predicting effect
- To evaluate the use of acute medication and oxygen use during ONS treatment

## **Study design**

Multicenter observational study

## **Study burden and risks**

The risks of the proposed study are very low since this is an observational study. It is very important to gain a detailed clinical follow up of this new treatment to determine real world efficacy, identify possible predictive factors, and to gain a better understanding of the mechanism of action.

## **Contacts**

### **Public**

Leids Universitair Medisch Centrum

Albinusdreef 2  
Leiden 2333ZA  
NL

### **Scientific**

Leids Universitair Medisch Centrum

Albinusdreef 2  
Leiden 2333ZA  
NL

## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Diagnosis of MICCH, according to the ICHD-III criteria and the ICON trial guidelines:

- o No relevant effect on maximum dosage or
- o Severe side effect or
- o Contra-indication for

At least three prophylactic drugs including

- \* Verapamil
- \* Lithium
- \* Topiramate

Patients should be receiving ONS implantation as part of clinical care

Patients have to be aged 18 years or older

Adequate control of the Dutch language

The ability and possibility to use an e-device

### Exclusion criteria

NA

## Study design

## Design

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruiting

Start date (anticipated): 22-11-2021

Enrollment: 200

Type: Actual

## Ethics review

Approved WMO

Date: 14-06-2021

Application type: First submission

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

metc-ldd@lumc.nl

Approved WMO

Date: 07-03-2023

Application type: Amendment

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

CCMO

### ID

NL75958.058.20