# Deferoxamine in Aneurysmal Subarachnoid Hemorrhage trial

Published: 03-01-2018 Last updated: 12-04-2024

This study investigates the safety and tolerability of deferoxamine use in patients with aneurysma subarachnoid hemorrhage.

**Ethical review** Not approved **Status** Will not start

**Health condition type** Central nervous system vascular disorders

**Study type** Interventional

### Summary

#### ID

NL-OMON45310

Source

ToetsingOnline

**Brief title** 

DASH

#### **Condition**

- Central nervous system vascular disorders
- Vascular therapeutic procedures
- Aneurysms and artery dissections

#### Synonym

cerebral spasm, delayed cerebral ischemia

#### Research involving

Human

### **Sponsors and support**

**Primary sponsor:** Radboud Universitair Medisch Centrum

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

#### Intervention

**Keyword:** delayed cerebral ischemia, iron chelator

#### **Outcome measures**

#### **Primary outcome**

Primary endpoint is the occurrence of DCI and total number of patients with

drug related adverse events, especially renal, hepatic or neurologic.

#### **Secondary outcome**

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# **Study description**

#### **Background summary**

Aneurysmal subarachnoid hemorrhage (SAH) is a form of stroke in which secondary neurological deterioration is an important cause of mortality and morbidity. These secondary changes, so called delayed cerebral ischemia (DCI), are caused by lysis of erythrocytes which can react to form iron, an toxic substance to the brain. Iron chelators remove the excess of iron and are standard care in iron-overloaded patients. Deferoxamine (DFO) an chelator has not been evaluated in SAH patients.

#### Study objective

This study investigates the safety and tolerability of deferoxamine use in patients with aneurysma subarachnoid hemorrhage.

#### Study design

A multicenter pilot study randomizing 40 patients into treatment of deferoxamine or placebo.

#### Intervention

In the treatment arm: DFO Initial dose: 1000 mg, IM or IV (max.IV rate: 15 mg/kg/hr), maintenance dose: 500 mg, IM or IV, every 4 hours. In the placebo arm at the same timepoints an equivalent volume bolus of NaCl 0.9%.

#### Study burden and risks

Patients with aneurysmal subarachnoid hemorrhage have standardized intensive, daily, laboratory and physical controls as part of the necessary treatment. Additional disadvantage for the patients will be the CT or MR scanning directly post treatment, and the MR scanning after 2 weeks. The risks of CT induced radiation effects is very low. The study will not be done in patients in bad clinical grade at time of randomization.

### **Contacts**

#### **Public**

Radboud Universitair Medisch Centrum

Philips van Leijdenlaan 15 Nijmegen 6525 EX NL

#### **Scientific**

Radboud Universitair Medisch Centrum

Philips van Leijdenlaan 15 Nijmegen 6525 EX NL

# **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

#### Inclusion criteria

<sup>\*</sup> Male or Female,

- \* 18-85 years old inclusive,
- \* subarachnoid hemorrhage diagnosed by CT on admission,
- \* Randomizable within 72 hours of subarachnoid hemorrhage,
- \* Saccular intracranial aneurysm proven by cerebral angiography or CTA,
- \* Surgical or endovascular obliteration is performed,
- \* Able to obtain written informed consent from patient or surrogate.
- \* Patients in good clinical grade (WFNS 1-3)

#### **Exclusion criteria**

- \* Pregnancy, as confirmed by routine urine test on admission,
- \* Abnormal renal function at time of randomization (GFR <60 mL/min)
- \* Elevated liver function test at time of randomization (AST > 45 U/L and ALT > 35 U/L.)
- \* History of liver disease or active liver disease, Active renal disease,
- \* Hypersensitivity to deferoxamine,
- \* Patient taking medication not recommended for concomitant use with deferoxamine as per the product label (e.g. high dose vit. C medication).
- \* Patients not able to complete the study follow-up.

# Study design

### **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Primary purpose: Treatment

#### Recruitment

NL

Recruitment status: Will not start

Enrollment: 40

Type: Anticipated

### Medical products/devices used

Product type: Medicine

Brand name: Desferal

Generic name: Deferoxamine

Registration: Yes - NL outside intended use

### **Ethics review**

Approved WMO

Date: 03-01-2018

Application type: First submission

Review commission: CCMO: Centrale Commissie Mensgebonden Onderzoek (Den

Haag)

Not approved

Date: 30-01-2018

Application type: First submission

Review commission: CCMO: Centrale Commissie Mensgebonden Onderzoek (Den

Haag)

# **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

EudraCT EUCTR2016 002784 34-NL

CCMO NL58448.000.17