# Evaluation of language comprehension in young children with white matter diseases: development and application of a screeningsinstrument.

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1. The development of a standardized screeningsinstrument to evaluate the language comprehension of severly handicapped children with movement disorders and who cannot speak, as a result of white matter damage.2.To evaluate the difference between...

| Ethical review        | Approved WMO                                      |
|-----------------------|---|
| Status                | Pending   |
| Health condition type | Congenital and peripartum neurological conditions |
| Study type            | Observational non invasive                        |

# Summary

### ID

NL-OMON29731

**Source** ToetsingOnline

Brief title Evaluation of language comprehension in NSCP

### Condition

Congenital and peripartum neurological conditions

Synonym Cerebral Palsy, infantile encephalopathy

Research involving

Human

### **Sponsors and support**

#### Primary sponsor: Vrije Universiteit Medisch Centrum

1 - Evaluation of language comprehension in young children with white matter disease ... 25-05-2025

#### Source(s) of monetary or material Support: Rotary club

### Intervention

Keyword: Evaluation, language comprehension, screeningsinstrument, white matter

### **Outcome measures**

#### **Primary outcome**

The score of the verified objects in numbers.

#### Secondary outcome

The difference in language comprehension of children with PVL and BGN.

# **Study description**

#### **Background summary**

Children with pre- or perinatal acquired white matter damage, are part of a larger population ,also called children with Cerebral Palsy. In most cases , white matter damage, is the result of hypoxic ischaemia: because of unsufficient bloodflow through the young and newborn brain, unresolvable damage is caused, especially in the white matter.

In premature born children (24 and 37 weeks of gestational age), hypoxic ischaemia is caused by respiratory problems of the infant and the need for invasive artificial respiratory stimulation. This chronic ischaemia can cause extensive damage to the white matter, also referred to as periventricular leucomalacie (PVL).

In the mature born child, hypoxic is chaemia is caused by problems with birth, often resulting in basal ganglia necrosis (BGN) and damage to the central cerebral cortex.

Communication and speech abilities are often impaired in children with cerebral palsy. Because of severely impaired movement disorders no speech abilities are possible, whereas often reliable gesture and facial expression are also impaired.

The aim of this study is to investigate and reveal insights in the language comprehension of non-speech children with Cerebral palsy. Since there is no developed and standardized common used test system for these children, the first

practice is to develop a screeningsinstrument which enables professionals to gain insights in the language development of these severely handicapped

children.

#### **Study objective**

1. The development of a standardized screeningsinstrument to evaluate the language comprehension of severly handicapped children with movement disorders and who cannot speak, as a result of white matter damage.

2.To evaluate the difference between language comprehension of children with PVL and BGN

3.To evaluate the effect of the insights in language comprehension of severely non- speech impaired children with movement disorders on the respectivily chosen or not chosen implementation of augmentative communication programmes for these children and the consequence of this choice for the quality of communication.

#### Study design

Observational study without invasive measurements

#### Study burden and risks

no risks

# Contacts

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# **Trial sites**

3 - Evaluation of language comprehension in young children with white matter disease ... 25-05-2025

### **Listed location countries**

Netherlands

# **Eligibility criteria**

**Age** Children (2-11 years)

### **Inclusion criteria**

Non-speech children with Cerebral Palsy between 30 -83 month of age; Mature born and healthy children between 12 - 48 month of age

### **Exclusion criteria**

suspected or diagnosed severe auditory handicapped suspected or diagnosed severe visual handicapped other chronic or/and neurological diseases or disturbances of conciousness (e.g. epileptic seizures)

# Study design

### Design

| Study type:         | Observational non invasive      |  |
|---------------------|---------------------------------|--|
| Intervention model: | Other                           |  |
| Allocation:         | Non-randomized controlled trial |  |
| Masking:            | Open (masking not used)         |  |
| Control:            | Active                          |  |
| Primary purpose:    | Diagnostic                      |  |
|                     |                                 |  |

### Recruitment

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| NL                        |            |
|---------------------------|------------|
| Recruitment status:       | Pending    |
| Start date (anticipated): | 15-09-2006 |

4 - Evaluation of language comprehension in young children with white matter disease ... 25-05-2025

Enrollment:

Type:

100 Anticipated

# **Ethics review**

Approved WMO Application type: Review commission:

First submission METC Amsterdam UMC

# **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 NL13606.029.06