

Explorative research for the maturation of sucking patterns in preterm infants; follow-up research for the relation with the outcome at the age of 27 and 48 months with regard to language and mental development.

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Also in the group of *healthy prematures*, many children appear to have a deviant sucking pattern op de a terme leeftijd. We want to know the implications of these deviant findings for the later development of the children in question. Only recently...

Ethical review	Approved WMO
Status	Pending
Health condition type	Other condition
Study type	Observational non invasive

Summary

ID

NL-OMON29823

Source

ToetsingOnline

Brief title

The relation between sucking and swallowing patterns and the later outcome

Condition

- Other condition
- Cranial nerve disorders (excl neoplasms)

Synonym

language development, mental development

Health condition

spraak- en taalontwikkeling, mentale/cognitieve ontwikkeling, motorische ontwikkeling

Research involving

Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum

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

Intervention

Keyword: Developmental outcome, Language Development, Premature infants, Sucking and swallowing patterns

Outcome measures

Primary outcome

BSID-II: developmental level in months

Reynell: language comprehension level in months

Schlichting: language expression level in month

SNELL: right/wrong score

Secondary outcome

none

Study description

Background summary

Recent publications indicate a relation between the development of zuigmotoriek and the outcome at a later age.

Palmer (1999) followed 18 children bij wie ze na de geboorte de NOMAS had afgenomen. She saw the children at ages 24-36 months. She employed the Bayley Scales of Infant Development and the Vineland Social Maturity Scale. All 7 children with a dysfunctional sucking pattern demonstrated a developmental delay and five demenstrated persistent developmental delay in one or more areas

at 36 months. The 2 children with a normal sucking pattern developed normally. Of the 9 children with a disorganized sucking pattern, 4 showed a deviant development at 24 months. The numbers included in this study were small, however.

Mizuno and Ueda (2005) found a significant relation between the voedingsgedrag (measured in terms of expression and sucking) of 65 new-born babies (mean gestational age 37.8 wks {SD 0.5} and the neurological development (measured with the Bayley Scales of Infant Development II) at 18 months.

Study objective

Also in the group of *healthy prematures*, many children appear to have a deviant sucking pattern op de a terme leeftijd. We want to know the implications of these deviant findings for the later development of the children in question.

Only recently a language screening instrument has become available, the SNEL [Spraak- en TaalNormen Eerste Lijns gezondheidszorg) (Luinge, 2005), which is reliable as well as easy to employ.

The aim of the prospective vervolgonderzoek, is to investigate whether there is relation between the development of sucking patterns in terms of the NOMAS and the development at later ages. The latter development is measured with the SNEL and BSID II (Bayley, 1993) at the ages of 24 and 48 months.

Research questions

1. Is there a relation between the NOMAS diagnosis at 40 weeks PMA and the SNEL score at 24 and 48 months?
2. Is there a relation between the NOMAS diagnosis at 40 weeks PMA and the level of development at 24 and 48 months, as measured with the BSD-II?

Study design

At the corrected age of two years, the parents of the previously included children receive a letter which informs them about the vervolgonderzoek and asks them to consent. When the parents do consent, the SNEL will be assessed by telephone and the parents themselves are invited to have the BSID-II assessed in the UMCG.

Study burden and risks

none

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Children (2-11 years)

Inclusion criteria

All infants who were included in the 'Explorative research in sucking and swallowing pattern in preterm infants' (METc 2003/144)

Exclusion criteria

There are no exclusion criteria

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Primary purpose: Diagnostic

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-06-2006

Enrollment: 45

Type: Anticipated

Ethics review

Approved WMO

Application type: First submission

Review commission: METC Universitair Medisch Centrum Groningen (Groningen)

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

NL12637.042.06