Test weighing: determining precision using a ‘double-check weighing’ method

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON25516

Source
Nationaal Trial Register

Health condition

breast feeding

Keywords:
English
-Test weighing
-breastfeeding
-Milk intake
-Precision

NL:
-Test wegen
-Borstvoeding
-Intake
-Precisie

Sponsors and support

Primary sponsor: VieCuri Medical centre
Tegelseweg 210
5915 BL Venlo
Source(s) of monetary or material Support: VieCuri Medical centre
Tegelseweg 210

5915 BL Venlo

Intervention

Outcome measures

Primary outcome

precision of test weighing, using a double-check weighing method for 2 scales in 2 groups: intake up to 20cc and 20cc and more

Secondary outcome

-Accuracy of test weighing, using a double-check weighing method for 2 scales in 2 groups: intake up to 20cc and 20cc and more.

-accuracy and precision including and excluding infants with monitor leads or intravenous lines

-Accuracy and precision including and excluding infants who vomited, or where milk was spilled.

-The influence of the childs state on accuracy and precision of test weighing.

-The influence of the pre feed weight on the precision of test weighing.

-The influence of the intake as a continuous variable on the precision of test weighing.

Study description

Background summary

Rationale: test weighing is used extensively to assess intake in breastfed infants. Data regarding its precision however differ and are contradictory. There is discussion about the technique and scales used. Our goal is to use a double check weighing procedure on 2 different scales and determine precision in a large group of newborn infants.

Objective: to determine the precision of test weighing on 2 different scales in 2 different intake groups: feeds up to 20 cc and feeds of 20cc and more.

Study design: diagnostic accuracy study in a cohort of newborn infants.

Study population: All exclusively bottle or nasogastric fed infants in the neonatal ward are

deemed eligible.

Intervention: infants are weighed twice before and twice after a feed in a standardized way by an independent investigator, unaware of the amount drunk. The weights before, as well as the weights after feeding, have to be within 5 grams. Otherwise a third weight has to be obtained. The difference between the averaged weights before and the averaged weights after feeding is taken to reflect intake in cc. The actual amount drunk will be determined by weighing the bottles before and after feeding.

Main study parameters/endpoints: precision will be calculated by determining the standard deviation of the mean of the difference between the test weighing amount and actual amount drunk.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Risks are negligible. Weighing is a routine procedure done in all neonatal wards. Weighing will be done in infants who are about to be fed, so it will not interfere with sleep or resting.

Study objective

Test weighing using a double-check weighing method is precise in determining infant intake: in more than 90% of weighings test weighing will be within 5ml of the actual amount drunk

Study design

not applicable.

Intervention

none

Contacts

Public
G.J. Jaspers
VieCuri Medical Center
Tegelseweg 210
5915 EA Venlo

Venlo
The Netherlands
0773205730
Scientific
G.J. Jaspers

VieCuri Medical Center
Tegelseweg 210
5915 EA Venlo

Venlo
The Netherlands
0773205730

Eligibility criteria

Inclusion criteria

-Admission in the neonatal ward.

-Bottle or fully nasogastric fed infants

Exclusion criteria

-If the treating pediatrician finds the infant to be too unstable for the extra weighing.

-If, according tot the treating pediatrician, the infant requires minimal handling.

-If the parents of caregivers speak insufficient Dutch to be able to give informed consent

Study design

Design

Study type:	Observational non invasive
Intervention model:	Factorial
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	05-01-2014
Enrollment:	40
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

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
NTR-new	NL4542
NTR-old	NTR4685
Other	: ABR48368

Study results

Summary results

Haase, B., et al., The development of an accurate test weighing technique for preterm and high-risk hospitalized infants. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine, 2009. 4(3): p. 151-6.

Savenije, O.E. and P.L. Brand, Accuracy and precision of test weighing to assess milk intake in newborn infants. Archives of disease in childhood. Fetal and neonatal edition, 2006. 91(5): p. F330-2