Body composition and neurodevelopment in preterm infants

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Early nutrition in preterm infants is essential for growth and neurodevelopment. The last decades more aggressive nutrition has been implemented in clinical practice to ensure optimal growth and thereby optimal neurodevelopmental outcome, as...

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	-

Samenvatting

ID

NL-OMON21514

Bron
NTR

Verkorte titel
BOND

Aandoening

preterm infants
body composition
neurodevelopmental outcome
nutrition

Ondersteuning

Primaire sponsor: Erasmus MC - Sophia Children's Hospital
Overige ondersteuning: ?

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Body composition (percentage body fat) at 2 years corrected age
Neurodevelopmental outcome assessed by Bayley Scales of Infant and Toddler Development (mental and motor outcome measures) and eye-tracker at 2-years corrected age

Toelichting onderzoek

Achtergrond van het onderzoek

This is a single-center ongoing, longitudinal observational cohort study conducted in the Netherlands. The aim of the study is to assess the association between body composition, as proxy of metabolic health, and neurodevelopmental outcome in preterm infants born before 30 weeks of gestation. Preterm infants are followed-up until the corrected age of 2 years with regular visits including body composition measurements, other markers of metabolic health and assessment of brain growth and neurodevelopmental outcome

Doel van het onderzoek

Early nutrition in preterm infants is essential for growth and neurodevelopment. The last decades more aggressive nutrition has been implemented in clinical practice to ensure optimal growth and thereby optimal neurodevelopmental outcome, as previous cohort studies showed that catch-up growth is associated with an improved neurodevelopmental outcome. However, it has also been shown recently that catch-up growth is associated with obesity and non-communicable diseases already in childhood. No studies assessed the influence of early growth and early nutrition on body composition in preterm infants in relation to neurodevelopmental outcome. We hypothesize that catch-up growth in the early postnatal period results in increased neonatal and childhood fat mass, but not in improved neurodevelopmental outcome.

Onderzoeksopzet

Follow-up at: term-equivalent age, 6 weeks, 6 months, 1 year and 2 years corrected age

Onderzoeksproduct en/of interventie

not applicable - observational trial

Contactpersonen

Publiek

Wytemaweg 80

Jorine A. Roelants
Rotterdam 3015 CN
The Netherlands
+31 10 7036015

Wetenschappelijk

Wytemaweg 80

Jorine A. Roelants
Rotterdam 3015 CN
The Netherlands
+31 10 7036015

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Preterm birth < 30 weeks of gestation

Admission to NICU within 48 hours after birth

Written informed consent

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Severe brain injury (IVH gr III/IV, post-hemorrhagic ventricular dilatation)

Perinatal asphyxia (pH < 7.00 and 5' min APGAR score <5)

Congenital TORCHES infection

Chromosomal abnormalities

Severe congenital anomalies

Onderzoeksopzet

Opzet

Onderzoeksmodel: Anders
Controle: N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	14-09-2014
Aantal proefpersonen:	150
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	21-07-2016
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL5831
NTR-old	NTR5985

Register	ID
Ander register	: MEC-2014-379

Resultaten

Samenvatting resultaten
not applicable