

Optimising nutrition to improve growth and reduce neurodisabilities in children with suspected or confirmed cerebral palsy

Submission date 23/04/2010	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
Registration date 23/04/2010	Overall study status Completed	<input checked="" type="checkbox"/> Protocol
Last Edited 05/01/2016	Condition category Nervous System Diseases	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
6797

Study information

Scientific Title
Optimising nutrition to improve growth and reduce neurodisabilities in children with suspected or confirmed cerebral palsy: a randomised interventional treatment trial

Acronym

Dolphin Study 2

Study objectives

The purpose of this study is to identify as early as possible children with a suspected or confirmed clinical diagnosis of cerebral palsy, defined as:

'A group of permanent disorders of the development of movement and posture, causing activity limitation, that are attributed to nonprogressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of cerebral palsy are often accompanied by disturbances of sensation, perception, cognition, communication, and behaviour, by epilepsy, and by secondary musculoskeletal problems.'

We will then institute a nutritional care programme that ensures optimal macro- and micro-nutrient intake over a critical period of brain development.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Oxford Research Ethics Committee B, 12/01/2009, ref: 08/H0605/155

Study design

Randomised interventional treatment trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Topic: Neurological, Generic Health Relevance and Cross Cutting Themes; Subtopic: Neurological (all Subtopics), Generic Health Relevance (all Subtopics); Disease: Nervous system disorders, Paediatrics

Interventions

The intervention is in the form of a neurotrophic supplement containing docosahexanoic acid (DHA), uridine monophosphate (UMP) and choline, along with supportive vitamins and minerals. The control being used is an iso-caloric, iso-nitrogenous placebo substance. The active supplement or control will be taken once daily and added to feed or food. This can be taken orally or via a feeding tube and supplementation will continue for the whole 2 years of the study. Follow Up Length: 24 month(s).

Intervention Type

Supplement

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Docosahexanoic acid (DHA), uridine mono-phosphate (UMP), choline, vitamins, minerals

Primary outcome(s)

Neurodevelopmental outcome which will be assessed using the Bayley Scale of Infant Development performed at baseline and at 12 and 24 months in to the study.

Key secondary outcome(s)

1. Growth: assessed using anthropometry carried out every 3 months (weight, height, skinfold measurements and head circumference)
2. Electrophysiology: Visual Evoked Potential and behavioural vision testing tested at baseline, 12 months post term, 24 months post term, 42 months post term
3. Neuroimaging: changes of brain biochemistry and choline uptake as estimated by MRS once at the end of the study
4. Indices of general health status: Prevalence of epilepsy, feeding difficulties, clinically significant gastro-oesophageal reflux, constipation, number of chest infections (requiring antibiotics) and hospital admissions to be assessed every 3 months
5. Corticospinal axon diameter: assessed by transcranial magnetic stimulation and will be done at baseline and at the end of the study

Completion date

31/12/2011

Eligibility

Key inclusion criteria

1. Children between the ages of 6 to 18 months, either sex
2. Suspected or confirmed clinical diagnosis of cerebral palsy as defined below:
'A group of permanent disorders of the development of movement and posture, causing activity limitation, that are attributed to nonprogressive disturbances that occurred in the developing fetal or infant brain. The motor disorders of cerebral palsy are often accompanied by disturbances of sensation, perception, cognition, communication, and behaviour, by epilepsy, and by secondary musculoskeletal problems.'
3. Parent or guardian who is willing to sign the consent form

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

6 months

Upper age limit

18 months

Sex

All

Key exclusion criteria

1. Children with progressive neurological degenerative conditions
2. Children with significant gastrointestinal disease
3. Parents considered by clinicians to be unable to follow the study protocol

Date of first enrolment

01/12/2008

Date of final enrolment

31/12/2011

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Oxford University

Oxford

United Kingdom

OX3 9DU

Sponsor information

Organisation

Clinical Trials and Research Governance (UK)

ROR

<https://ror.org/052gg0110>

Funder(s)

Funder type

Charity

Funder Name

Sparks (UK)

Alternative Name(s)

Sparks Charity

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	17/03/2015		Yes	No