Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Effect of zinc supplementation on Physical growth and psychomotor function of school children

Protocol summary

Summary

Zinc sulfate is required for growth and development of human babies and its deficiency cause growth failure in children. In this study we will elect 7-12 years old children in five schools of Mashhad city as cluster randomized clinical trial in two groups, case and control, after coordination with educational organ. In case group they will receive 20 mg zinc sulfate as syrup and in control group 20 mg dextrose water as placebo. They will follow up during 6 months. Weight, length, arm circumference will measure for growth pattern and Time On Target for motor function in before, 3 months and 6 months after intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138711021162N9**
Registration date: **2009-02-16, 1387/11/28**
Registration timing: **prospective**

Last update:
Update count: **0**

Registration date

2009-02-16, 1387/11/28

Registrant information

Name
Ashraf Mohammadzadeh
Name of organization / entity
Neonatal Research Center of Mashhad University of Medical Sciences
Country
Iran (Islamic Republic of)
Phone
+98 51 1852 1121
Email address
mohamadzadeha@mums.ac.ir

Recruitment status

Recruitment complete

Funding source

Mashhad university of medical sciences

Expected recruitment start date

2009-02-19, 1387/12/01

Expected recruitment end date

2009-07-22, 1388/04/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of zinc supplementation on Physical growth and psychomotor function of school children

Public title

Effect of zinc supplementation on Physical growth and psychomotor function of school children

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion: School children, 7-12 years old, healthy children, agree mentioned parents. Exclusion criteria: Prematurity or low birth weight, chronic disease (marasmus, cystic fibrosis,...), reject of drug by child

Age

From **7 years** old to **12 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Vice chancellor for research of Mashhad university of medical sciences

Street address
Ghoreshi building, Daneshgah street

City
Mashhad

Postal code
13131-91379

Approval date
2008-12-29, 1387/10/09

Ethics committee reference number
87/108377

Health conditions studied

1

Description of health condition studied
Effect of zinc supplementation on Physical growth

ICD-10 code
R62.8

ICD-10 code description
Other lack of expected normal physiological development

2

Description of health condition studied
Effect of zinc supplementation on psychomotor function

ICD-10 code
F90.0

ICD-10 code description
Disturbance of activity and attention

Primary outcomes

1

Description
psychomotor function

Timepoint
befor, 3 months after, 6 months after

Method of measurement
Time On Target

2

Description
Physical growth

Timepoint
befor, 3 months after, 6 months after

Method of measurement
Balance ,centimeter

Secondary outcomes

empty

Intervention groups

1

Description
control: 20 mg placebo

Category
Placebo

2

Description
case:20 mg zinc supplementation daily for 6 months

Category
Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center
five schools in Mashhad city

Full name of responsible person
Dr.Ashraf mohammadzadeh

Street address
Neonatal research center- NICU- Emamreza hospital-mashhad-Iran

City
Mashhad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Mashhad university of medical sciences

Full name of responsible person
Dr jalil tavakol afshari

Street address
Ghoreshi bulding-daneshgah street

City

Mashhad

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Mashhad university of medical sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Neonatal Research Center

Full name of responsible person

Dr. Ashraf mohammadzadeh

Position

Neonatologist, professor

Other areas of specialty/work

Street address

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Person responsible for scientific inquiries

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty