Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Evaluation for the effect of supplemental Iron on educational achievement in “non anemic Iron deficient” girl students in department of Biology, faculty of sciences, University of Isfahan, in year 2011

Protocol summary

Summary

Aim: This is a double blind study, a supplemental Iron therapy versus placebo, aimed for evaluating the effect of supplemental iron therapy on the academic educational achievement. Population study: all the female students of the University of Isfahan, Faculty of science, Department of Biology, will be screened for iron status. Among this population, 80 students with Iron deficiency without anemia (normal hemoglobin concentration, but low serum ferritin level) will be selected for the second stage. Students with iron deficiency anemia will be treated and excluded from the study. Study design: all the female students of the Department of Biology, approx 300 individuals, will be included in the first stage of the study. As the frequency of iron deficiency without anemia is reported 35-40%, approx 120 students have chance to be included in the second stage of the study. Among them 80 students will be chosen with random computerized selection, and divided into two groups of intervention and control. The intervention group will receive 50 mg ferrous sulfate twice a day for 6 weeks, while the control group will receive placebo with the same dose. Serum ferritin level will be reassessed in both groups(to re-evaluate Iron status). The educational achievements of the aforementioned students will be compared before and after iron supplemental therapy in both groups. Assessments will be done by calculating the differences in students’ marks regarding their semester reports using Chi square and Fisher tests.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201008254630N1**

Registration date: **2011-02-27, 1389/12/08**

Registration timing: **prospective**

Last update:

Update count: **0**

Registration date

2011-02-27, 1389/12/08

Registrant information

Name

Alireza Moafi

Name of organization / entity

Isfahan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 913 318 1489

Email address

moafi@med.mui.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Isfahan University of Medical Sciences

Expected recruitment start date

2011-04-04, 1390/01/15

Expected recruitment end date

2011-04-19, 1390/01/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation for the effect of supplemental Iron on educational achievement in “non anemic Iron deficient”

girl students in department of Biology, faculty of sciences, University of Isfahan, in year 2011

Public title
Effect of supplemental Iron on educational achievement
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria: 1) all the female student who are studding in Isfahan university faculty of science, department of biology, in the second semester of year 1389-90, who have Iron deficiency without anemia (low ferritin but no anemia). Exclusion criteria: 1) anemia; 2) any chronic illness; 3) any obvious emotional or unexpected event during the trial (i.e. loss of family members, marriage, pregnancy...); 4) Refusal to be included in the clinical trial; 5) drug complications that may interfere with the use of iron supplement .
Age
No age limit
Gender
Female

Phase
2
Groups that have been masked
No information
Sample size
Target sample size: **80**
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
Ethic committee, Isfahan University of Medical Sciences
Street address
Isfahan University of Medical Sciences, Hezarjerib Ave.
City
Isfahan
Postal code
Approval date
2011-01-30, 1389/11/10
Ethics committee reference number
189073

Health conditions studied

1

Description of health condition studied
Iron deficiency without anemia
ICD-10 code
E61.1
ICD-10 code description
Iron deficiency

Primary outcomes

1

Description
Educational ranking
Timepoint
Before intervention, and at the end of the semester (after the end of intervention)
Method of measurement
Marks mentioned in the semester report

Secondary outcomes

1

Description
Complications of prescribing supplemental Iron
Timepoint
Every 3 weeks
Method of measurement
Asking question face to face

Intervention groups

1

Description
Intervention: Ferrous sulfate (50 mg Tab.) , 2 times per day, for 6 weeks
Category
Treatment - Drugs

2

Description
Control group: placebo Tab, 2 times per day, for 6 weeks (same as Intervention group
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Health center of University of Isfahan
Full name of responsible person
Majid Ghias MD

Street address
University of Isfahan, Hezarjerib Ave.
City
Isfahan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Isfahan University of Medical Sciences
Full name of responsible person
Mohsen Jangorban MD
Street address
Vice chancellor for research, Isfahan University of Medical Sciences, Hezarjerib Ave.
City
Isfahan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Isfahan 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
Isfahan University of Medical Sciences
Full name of responsible person
Alireza Moafi
Position
Pediatric Hematologist Oncologist
Other areas of specialty/work
Street address
Faculty of Medicine, Isfahan University of Medical Sciences, Hezarjerib Ave.
City
Isfahan
Postal code
Phone
+98 31 1236 8005
Fax
Email
moafi@med.mui.ac.ir
Web page address
http://mui.ofis.ir/default.aspx?general&member=920

Person responsible for scientific inquiries

Contact
Name of organization / entity
Isfahan University of Medical Sciences
Full name of responsible person
Alireza Moafi
Position
Pediatric Hematologist Oncologist
Other areas of specialty/work
Street address
Faculty of Medicine, Isfahan University of Medical Sciences, Hezarjerib Ave.
City
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Phone
+98 31 1236 8005
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Person responsible for updating data

Contact
Name of organization / entity
Isfahn University of Medical Sciences
Full name of responsible person
Alireza Moafi
Position
Pediatric Hematologist Oncologist
Other areas of specialty/work
Street address
Faculty of medicine, Isfahan University of Medical Sciences, Hezarjerib Ave.
City
Isfahan
Postal code
Phone
+98 31 1236 8005
Fax
Email
moafi@med.mui.ac.ir
Web page address
http://mui.ofis.ir/default.aspx?general&member=920

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