Safe and effective iron supplementation in malaria endemic areas

Submission date	Recruitment status No longer recruiting	Prospectively registered		
10/04/2012		☐ Protocol		
Registration date 16/05/2012	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	Individual participant data		
30/01/2017	Haematological Disorders			

Plain English summary of protocol

Background and study aims

Iron supplementation is an important public health intervention. However, in areas where malaria is common, iron supplementation may not be without risk because iron can stimulate the growth of malaria parasites. The aim of this study is to compare the incidence of malaria between children given iron supplementation and children not given iron supplementation.

Who can participate?

School age children (6-18 years old) tested as not infected with malaria.

What does the study involve?

The children will be randomly allocated to receive Albendazole (a drug to treat infections caused by worms) for three consecutive days in combination with either iron supplementation or a matching placebo (dummy drug) for 6 days per week for a total of 8 weeks.

What are the possible benefits and risks of participating?

Participants will receive anti-worm treatment for worm infections and iron treatment for their anemia. The iron tablet is given in individual doses based on body weight and under supervision of a medical doctor, so there is little or no risk of dangers from the side effects.

Where is the study run from?

Nangapanda Region, District of Ende, Flores Island, Indonesia

When is the study starting and how long is it expected to run for? July 2011 to January 2012

Who is funding the study?
Nutricia Research Foundation (Netherlands)

Who is the main contact? Prof. Maria Yazdanabkshsh m.yazdanbakhsh@lumc.nl

Contact information

Type(s)

Scientific

Contact name

Prof Maria Yazdanbakhsh

Contact details

Department of Parasitology Leiden University Medical Center Albinusdreef 2 Leiden Netherlands 2333 ZA

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

2010-26

Study information

Scientific Title

Towards safe and effective iron supplementation in malaria endemic areas: randomized double-blind placebo controlled trial

Study objectives

Iron supplementation in anemic subjects with submicroscopic malaria increases hemoglobin levels but does not increase parasitaemia.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethical Committee of Faculty of Medicine, University of Indonesia, 08/03/2010, ref: 96/PT02.FK/ETIK/2010, addendum ref: 459/PT02.FK/43/N/2011

Study design

Randomized placebo-controlled clinical trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Prevention

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Anemia, malaria and geohelminths

Interventions

400 mg albendazole per day orally for three consecutive days in combination with iron supplementation or matching placebo 6 mg/kg body weight for 6 days/week for total duration 8 weeks.

Intervention Type

Supplement

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Albendazole, iron supplements

Primary outcome measure

Microscopic and submicroscopic incidence of malaria

Secondary outcome measures

- 1. Changes in hemoglobin levels
- 2. Iron parameters (ferritin, sTFR)
- 3. Endothelial cells markers (ICAM-1 and Vwf)
- 4. C-reactive protein (CRP)

Overall study start date

28/07/2011

Completion date

31/01/2012

Eligibility

Key inclusion criteria

- 1. Those who have given informed consent
- 2. Both males and females

- 3. Aged between 6-18 years old
- 4. Malarial parasitemia negative by microscopy
- 5. Hemoglobin (Hb) > 8 g/dl
- 6. Hb < 11.5 g/dL for children aged <7 years
- 7. Hb <12 g/dL for girls aged \geq 7 years
- 8. Hb <13 g/dL for boys aged >=7 years

Participant type(s)

Patient

Age group

Child

Lower age limit

6 Years

Upper age limit

18 Years

Sex

Both

Target number of participants

350

Key exclusion criteria

Clinical symptoms indicating malaria or any severe underlying condition

Date of first enrolment

28/07/2011

Date of final enrolment

31/01/2012

Locations

Countries of recruitment

Indonesia

Netherlands

Study participating centre Leiden University Medical Center

Leiden Netherlands 2333 ZA

Sponsor information

Organisation

Nutricia Research Foundation (Netherlands)

Sponsor details

Danone Place Schiphol P.O. Box 75538 Schiphol-Airport Amsterdam Netherlands 1118 ZN

Sponsor type

Research organisation

Website

http://www.nutricia-research-foundation.org

ROR

https://ror.org/00vt3ry76

Funder(s)

Funder type

Research organisation

Funder Name

Nutricia Research Foundation (Netherlands)

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Netherlands

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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?
Results article	results	28/01/2017		Yes	No