

Clinical Trial Protocol

Iranian Registry of Clinical Trials

07 Jul 2026

Evaluation of multispecies probiotics on children and adolescents with migraine headaches during 3 months of treatment and a 3 months follow up period

Protocol summary

Study aim

Evaluation of multi-specious probiotics on prophylaxis of children and adolescents with common migraine headaches in 3 months therapeutic and 3 months follow up periods

Design

The clinical trial was randomized, parallel-group trial with blinded outcome assessment, designed for 54 patients.

Settings and conduct

Participants are selected according to inclusion criteria and after signing of the consent, will be divided randomly into 3 similar groups of prebiotics, probiotics and vitamin D and placebo . Clinical findings, scales and questioners will be evaluated monthly . Blood sampling will be performed at the beginning and after 3 months of study . As a double-blind study, participants and evaluators are unaware of the substance's nature. After 3 months of therapy the patients will be followed for next 3 months .

Participants/Inclusion and exclusion criteria

6-18 years old patients with common migraine, normal vitamin D level, no underlying neurologic disease as well as medication, no use of antibiotics or probiotics in 2 recent weeks, Fill out the consent form.

Intervention groups

Patients who fill the inclusion criteria are randomly classified into three following groups: receive probiotics, probiotics with vitamin D, and a placebo. Symptoms, examination, quality of life, and headache severity are mentioned monthly for three months. Inflammatory factors and intestinal permeability characteristics are studied by laboratory tests at the beginning and end of the study.

Main outcome variables

Evaluation of multi-specious probiotics on intensity and frequency of headaches and quality of life of children and adolescents with common migraine .

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20110628006907N17**

Registration date: **2022-05-21, 1401/02/31**

Registration timing: **prospective**

Last update: **2022-05-21, 1401/02/31**

Update count: **0**

Registration date

2022-05-21, 1401/02/31

Registrant information

Name

Mahmoudreza Ashrafi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 6612 9252

Email address

ashrafim@tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-06-22, 1401/04/01

Expected recruitment end date

2022-10-23, 1401/08/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of multispecies probiotics on children and adolescents with migraine headaches during 3 months of treatment and a 3 months follow up period

Public title

The prophylactic effect of probiotics on children and adolescents with migraine headache

Purpose

Prevention

Inclusion/Exclusion criteria**Inclusion criteria:**

Suffering from common migraine (headache without aura) according to the International Headache society criteria (IHS) Indication of migraine prophylactic treatment (at least four migraine attacks per 4 weeks; or severe dysfunction in daily and school activities during prospective baseline phase) Normal vitamin D level No systemic or underlying disease Other medication that affect the nervous system, such as anti- seizure medication, should not to be used simultaneously No antibiotic consumption in the recent 2 weeks Informed consent of parents

Exclusion criteria:

Underlying systemic or neurologic disease Simultaneous consumption of drugs such as anti-seizure medication that make an impact on nervous system Anti-biotic consumption (oral or parenteral) in the recent 2 weeks Another probiotic consumption in the recent 2 weeks The patient/parents do not agree to participate in the study

Age

From **6 years** old to **18 years** old

Gender

Both

Phase

2-3

Groups that have been masked

- Participant
- Care provider
- Outcome assessor
- Data analyser

Sample size

Target sample size: **54**

Randomization (investigator's opinion)

Randomized

Randomization description

According to formula of sample size, the patients are randomly allocated into three groups of receiving probiotics, combination of probiotics and vitamin D and control group of placebo treatment, by using a balanced block randomization technique. To achieve the goal, they were divided into 6 and 9 blocks. All subjects were randomly allocated by online randomization software to generate random-number sequences. {Sealed Envelope Ltd. 2015. Create a blocked randomization list. [Online] Available from: <https://www.sealedenvelope.com/simple-randomiser/v1/lists> [Accessed 15 Dec 2015]}. The coordinator and physician/s who evaluate inclusion /exclusion criteria and patient registration are completely blind.

Blinding (investigator's opinion)

Double blinded

Blinding description

Considering the study as a double-blind one, the placebo was presented to the control group is similar to probiotics in appearance, taste, and administration roles. The patients, recruiter and the physicians who evaluate the patients during the study are blind to drug or placebo

Placebo

Used

Assignment

Parallel

Other design features

Monthly visits and study of questionnaires and scales for clinical symptoms . Paraclinical laboratory exams to evaluate inflammatory factors and intestinal permeability characters at the beginning of study and after 3 months of receiving drug or placebo .

Secondary Ids

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Tehran University of Medical Sciences

Street address

No 226, Central organization of Tehran University of Medical Sciences, Ghods Street, Keshavarz Blvd

City

Tehran

Province

Tehran

Postal code

1417653761

Approval date

2022-04-20, 1401/01/31

Ethics committee reference number

IR.TUMS.MEDICINE.REC.1401..803

Health conditions studied**1****Description of health condition studied**

Migraine headache

ICD-10 code

G43.019

ICD-10 code description

Migraine without aura, intractable, without status migrainosus

Primary outcomes**1****Description**

Evaluation of multi-specious probiotics on headache intensity

Timepoint

At the beginning of the study followed by monthly evaluation in a three months interventional period and follow up

Method of measurement

Questionnaire of Visual analogue scale (VAS) for more than 10 years and Visual Pain Scale less than 10 years

2

Description

Evaluation of multi-specious probiotics on headache frequency

Timepoint

At the beginning of the study followed by monthly evaluation in a three months interventional period and follow up

Method of measurement

Questionnaire of frequency of each attack in a month

3

Description

Evaluation of multi-specious probiotics on quality of life

Timepoint

At the beginning of the study followed by monthly evaluation in a three months interventional period and follow up

Method of measurement

PEDMIDAS Questionnaire

Secondary outcomes

1

Description

Evaluation of multi-specious probiotics on inflammatory factors in blood including of PCAP,CGRP

Timepoint

At the beginning and end of the study

Method of measurement

Laboratory Evaluation (kit)

2

Description

Evaluation of multi-specious probiotics on intestinal permeability characters With LPS

Timepoint

At the beginning and end of the study

Method of measurement

Laboratory Evaluation (kit)

3

Description

Drug adverse effect

Timepoint

Any time during the study

Method of measurement

Ask from participants and parents

Intervention groups

1

Description

The 1st Intervention group: The children who suffers from common migraine headache, are going to be treated by a sachet/ day of probiotics made by Farabiotic company for three months. Clinical aspects, examination, headache severity and quality of life are measured at the beginning of study and then monthly. After that, children are followed for 3 months without any medication. Blood samples to evaluate the inflammatory factors as well as intestinal permeability characters are drawn at the beginning and end of the study.

Category

Treatment - Drugs

2

Description

The 2nd Intervention group: The children who suffers from common migraine headache, are going to be treated by a sachet/ day as a combination of probiotics and vitamin D, made by Farabiotic company for three months. Clinical aspects, examination, headache severity and quality of life are measured at the beginning of study and then monthly. After that, children are followed for 3 months without any medication. Blood samples to evaluate the inflammatory factors as well as intestinal permeability characters are drawn at the beginning and end of the study.

Category

Treatment - Drugs

3

Description

Control group: The children who suffers from common migraine headache, are going to be treated by a sachet/ day of placebo made by Farabiotic company for three months. Clinical aspects, examination, headache severity and quality of life are measured at the beginning of study and then monthly. After that, children are followed for 3 months without any medication. Blood samples to evaluate the inflammatory factors as well as intestinal permeability characters are drawn at the beginning and end of the study.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Children's Medical Center Hospital

Full name of responsible person

Mahmoud Reza Ashrafi

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Children's Medical Center Hospital, No 62, Gharib

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Email

ashrafim@tums.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Akbar Fotohee

Street address

Sixth floor, Central bulding of Tehran University of Medical Sciences

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1417613151

Phone

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Email

vcr@tums.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Tehran University of Medical Sciences

Proportion provided by this source

55

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

2

Sponsor

Name of organization / entity

Farabiotic Company

Full name of responsible person

Mohammad Mohammadi

Street address

Tehran, at the end of North Kargar Street, next to the University of Tehran dormitory, Center for the Development of Pharmaceutical Technology Units, No. 1462

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Province

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Postal code

1439955991

Phone

+98 21 8098 3588

Email

info@farabiotic.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Farabiotic Company

Proportion provided by this source

45

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Industry

Person responsible for general inquiries

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Bitra Heirati Asbagh

Position

Pediatric Neurology Fellow

Latest degree

Specialist

Other areas of specialty/work

Pediatrics

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Mahmoud Reza Ashrafi

Position

Professor

Latest degree

Subspecialist

Other areas of specialty/work

Neurology

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Person responsible for updating data

Contact

Name of organization / entity

Tehran University of Medical Sciences

Full name of responsible person

Zahra Rezaei

Position

Pediatric Neurologist

Latest degree

Subspecialist

Other areas of specialty/work

Neurology

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

All data would be available as long as the deidentification process is completed.

When the data will become available and for how long

Six months after data publication, it would be available with no limitation.

To whom data/document is available

Researchers of governmental or private research centers, researchers of University research centers, Knowledge-based companies,

Under which criteria data/document could be used

Data/ document is available for other research or academic centers to run a relevant study.

From where data/document is obtainable

All documents could be used in other research and academic institutes providing a comprehensive reference mentioned.

What processes are involved for a request to access data/document

Requesting by an email providing the data/document's application/s

Comments