

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Evaluation of the effectiveness of Cyproheptadine on paroxysmal short-time headache in children between 2 to 15 years of age: A single-arm clinical trial

Protocol summary

Study aim

To determine the effectiveness of Cyproheptadine on paroxysmal short-time headaches in children aged 2 to 15 years referred to Imam Hossein Hospital in Isfahan in 2021-2022

Design

A non-randomized, single-arm, non-blinded clinical trial

Settings and conduct

All patients will be initially evaluated, including physical examinations, EEG, and neuroimaging tests. After entering the study, a pre-designed checklist will be used for initial data collection, including demographic information, severity and frequency of headache, onset of symptoms, duration of attacks, accompanying symptoms, and history of drug side effects. After providing the necessary training to the parents, they are asked to record the headaches accurately in terms of severity, duration, and count each day. During the study period (three months), patients will be visited on a monthly basis and any drug side effects will be recorded by a checklist.

Participants/Inclusion and exclusion criteria

Children aged 2 to 15 years who diagnose with episodic paroxysmal hemicrania according to ICHD-3 criteria at the neurology clinic of Imam Hossein Hospital in Isfahan from 1400 to 1401 will be included. Patients who have other causes for their headache (such as epilepsy etc.), who are taking medication for their headache, who are allergic to Cyproheptadine or other similar medications, or who have another severe illness that make them unable to record headache events will not enter the study.

Intervention groups

Cyproheptadine is available in the form of 4 mg tablets and 2 mg in 5 ml syrup. In this study, the dose will be 0.2 to 0.4 mg per kilogram of child weight prescribed in two divided doses. Also, necessary recommendations will be

made about the factors that may increase the severity and frequency of headaches, such as dietary, physical, and psychological causes.

Main outcome variables

Severity, duration, and frequency of headaches

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190208042654N5**

Registration date: **2022-02-22, 1400/12/03**

Registration timing: **prospective**

Last update: **2022-02-22, 1400/12/03**

Update count: **0**

Registration date

2022-02-22, 1400/12/03

Registrant information

Name

Vahid Mansouri

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

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Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-04-04, 1401/01/15

Expected recruitment end date

2023-03-21, 1402/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effectiveness of Cyproheptadine on paroxysmal short-time headache in children between 2 to 15 years of age: A single-arm clinical trial

Public title

Evaluation of the effectiveness of Cyproheptadine on paroxysmal short-time headache in children

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

Children with 2 to 15 years of age Children with episodic paroxysmal hemicrania referred to neurology clinic whose disease has been definitively diagnosed according to the ICHD criteria. Number of attacks of equal or more than once a week

Exclusion criteria:

Patients' unwillingness to cooperate during the study Severe and uncontrollable side effects of cyproheptadine If, based on possible laboratory or imaging findings, a diagnosis other than episodic paroxysmal hemicrania is made during the study Epilepsy or epileptic headaches Existence of structural anomalies in MRI imaging History of allergies to similar drugs Inability to record data on the number, duration, and severity of headaches Taking a prophylactic drug other than Cyproheptadine Severe psychiatric problems such as depression or ADHD

Age

From **2 years** old to **15 years** old

Gender

Both

Phase

3

Groups that have been masked

No information

Sample size

Target sample size: **20**

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Single

Other design features**Secondary Ids**

empty

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

Ethics committee of Isfahan University of Medical Sciences

Street address

Hezar Jarib Ave

City

Isfahan

Province

Isfahan

Postal code

8174673461

Approval date

2022-02-21, 1400/12/02

Ethics committee reference number

IR.MUI.MED.REC.1400.819

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

Episodic Paroxysmal hemicrania

ICD-10 code

G44.03

ICD-10 code description

Episodic paroxysmal hemicrania

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

Frequency, duration, and severity of headache attacks and drug side effects

Timepoint

before intervention and each month after intervention

Method of measurement

Checklist includes measuring the number of attacks per week, the duration of attacks in form of minutes and its severity according to the VAS criteria and the occurrence of known side effects

Secondary outcomes

empty

Intervention groups**1****Description**

Intervention group: Cyproheptadine 0.2 to 0.4 mg per kg bodyweight of the child is given in two divided doses for the child. Cyproheptadine is available in the form of 4 mg tablets and 2 mg syrup in 5 ml. These pills are purchased domestically from Jalinus pharmaceutical company and are prescribed to all patients from the same drug brand.

In addition to prescribing medication to all patients, the necessary recommendations will be made about the factors that may increase the severity and frequency of headaches, such as dietary, physical, and psychological causes.

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

Emam Hossein Hospital

Full name of responsible person

Mohammad Reza Zolfaghari

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Emam Khomeini Ave

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Esfahan University of Medical Sciences

Full name of responsible person

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Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Esfahan University of Medical Sciences

Proportion provided by this source

100

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

Person responsible for general inquiries**Contact****Name of organization / entity**

Esfahan University of Medical Sciences

Full name of responsible person

Jafar Nasiri

Position

Assistant Professor

Latest degree

Subspecialist

Other areas of specialty/work

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Position

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Latest degree

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Person responsible for updating data

Contact

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Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

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

Study Protocol

Undecided - It is not yet known if there will be 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

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

Clinical Study Report

Undecided - It is not yet known if there will be 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