

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

30 May 2026

### Comparison of the effect of ranitidine syrup with Quince syrup in pediatric gastroesophageal reflux aged 12 to 48 months

#### Protocol summary

##### Study aim

Comparison of the effect of ranitidine syrup with Quince syrup in pediatric gastroesophageal reflux disease (GERD) patients aged 12 to 48 months with ranitidine syrup

##### Design

A double blind randomized controlled clinical trial in pediatric GERD patients aged 12 to 48 months. Patients are randomly selected on the basis of a quadrilateral block for use in one of the pharmaceutical forms. Total sample size: 80 patients in two treatment and control group

##### Settings and conduct

Participants were selected from pediatrics with GERD aged 12 to 48 months based on clinical manifestations and initial confirmation of pediatric gastroenterology referring to the gastroenterology clinic of Ghaem Hospital in Mashhad . After completing the initial history and the GSQ-YC questionnaire, consent form were filled by parents, then participants were follow up for 4 weeks. Data collection is done by using the GSQ-YC questionnaire. Participants are randomly divided on the basis of a quadrilateral block in one of the groups. The same type of bottles have been used for all interventions.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Patients aged 12 to 48 months with common symptoms of reflux disease (heartburn, regurgitation, vomiting, epigastric pain and appropriate weight loss) for at least 2 times a week. Exclusion criteria: People with complication of GERD or underlying disease (neurological, cardiac, pulmonary, liver and kidney) or mental retardation and people who have used other herbal remedies during this period.

##### Intervention groups

Participants were divided randomly into two groups. The control group received daily "Ranitidine syrup" and the placebo syrup and the case group received "Ranitidine syrup" and "Quince syrup"

#### Main outcome variables

Severity of vomiting; number of vomiting; severity of hiccups; frequency of hiccups; severity of abdominal pain; frequency of abdominal pain

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20170501033750N2**  
Registration date: **2018-04-20, 1397/01/31**  
Registration timing: **retrospective**

Last update: **2018-04-20, 1397/01/31**

Update count: **0**

##### Registration date

2018-04-20, 1397/01/31

##### Registrant information

##### Name

maryam naeimi

##### Name of organization / entity

babol university of medical science

##### Country

Iran (Islamic Republic of)

##### Phone

+98 51 3761 6129

##### Email address

m.naeimi@mubabol.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

governmental

##### Expected recruitment start date

2017-06-10, 1396/03/20

##### Expected recruitment end date

2018-01-19, 1396/10/29

**Actual recruitment start date**

2017-06-17, 1396/03/27

**Actual recruitment end date**

2018-01-10, 1396/10/20

**Trial completion date**

empty

**Scientific title**

Comparison of the effect of ranitidine syrup with Quince syrup in pediatric gastroesophageal reflux aged 12 to 48 months

**Public title**

The effect of Quince syrup in pediatric gastroesophageal reflux aged 12 to 48 months

**Purpose**

Treatment

**Inclusion/Exclusion criteria****Inclusion criteria:**

Patients in the age group of 12 to 48 months. People with at least 2 times a week with common symptoms of reflux disease (heartburn, regurgitation, vomiting, epigastric pain and appropriate weight loss for at least a month Those who are newly diagnosed or who have been suffering from reflux, have not taken any medications for at least one month and will want to start their treatment again

**Exclusion criteria:**

Patients with severe reflux disease (severe onset: symptoms of severe esophagitis, vomiting, life-threatening symptoms such as apnea, pneumonia, esophageal stricture and systemic diseases) due to the need for treatments Another intervention, including surgery or other medications, is withdrawn from the project because of ethical considerations (non-deprivation of the patient and non-risk for the volunteers) Children with a disease (neurological, cardiac, pulmonary, liver and kidney) or mental retardation People who have used other herbal remedies during this period People who need to use chemical drugs during the plan due to the specific disease People with a history of allergy to herbal medicines

**Age**

From **1 year** old to **4 years** old

**Gender**

Both

**Phase**

3

**Groups that have been masked**

- Participant
- Care provider
- Investigator
- Outcome assessor
- Data analyser

**Sample size**

Target sample size: **80**

Actual sample size reached: **96**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

The method of randomization in this study is quadruple

blocking method and the randomization unit is individual and tool is statistical software. The sequencing will be done by quadruple blocking. Concealing done by using similar form and size bottle for both groups, and neither the interventions nor the volunteers knows how to allocate the intervention.

**Blinding (investigator's opinion)**

Double blinded

**Blinding description**

In this study, patients are completely unaware of which drugs they received. Also, the investigator is completely unaware that the two groups received which drug

**Placebo**

Used

**Assignment**

Parallel

**Other design features****Secondary Ids**

empty

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

Babol University of Medical Sciences

**Street address**

Ganj Afroz Street.babol

**City**

Babo

**Province**

Mazandaran

**Postal code**

15.3.2017

**Approval date**

2017-03-15, 1395/12/25

**Ethics committee reference number**

Mubabol.hri.rec.1395.114

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

Gastro-oesophageal reflux

**ICD-10 code**

K21

**ICD-10 code description**

Gastro-esophageal reflux disease

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

Severity of nausea

**Timepoint**

A week before treatment, the second, fourth and sixth weeks after treatment

## Method of measurement

GSQ-YC standard questionnaire

### 2

#### Description

Numbers of vomiting

#### Timepoint

A week before treatment, the second, fourth and sixth weeks of treatment

#### Method of measurement

GSQ-YC standard questionnaire

### 3

#### Description

Severity of hiccups

#### Timepoint

The beginning of the week, the second week, the fourth, the sixth

#### Method of measurement

GSQ-YC standard questionnaire

### 4

#### Description

Severity of abdominal pain

#### Timepoint

The beginning of the week, the second week, the fourth, the sixth

#### Method of measurement

GSQ-YC standard questionnaire

### 5

#### Description

Frequency of abdominal pain

#### Timepoint

The beginning of the week, the second week, the fourth, the sixth

#### Method of measurement

GSQ-YC standard questionnaire

### 6

#### Description

Severity of regurgitation

#### Timepoint

The beginning of the week, the second week, the fourth, the sixth

#### Method of measurement

GSQ-YC standard questionnaire

### 7

#### Description

Frequency of hiccups

#### Timepoint

The beginning of the week, the second week, the fourth, the sixth

#### Method of measurement

GSQ-YC standard questionnaire

## Secondary outcomes

### 1

#### Description

Refuse to eat

#### Timepoint

The last week of treatment, the second week of the fourth and sixth treatment

#### Method of measurement

GSQ-YC standard questionnaire

### 2

#### Description

Inappropriate weighing

#### Timepoint

Before starting treatment and then finishing treatment for the sixth week

#### Method of measurement

Baby growth curve

### 3

#### Description

Swallowing disorder

#### Timepoint

Before starting treatment and during treatment until the 6th week

#### Method of measurement

GSQ-YC standard questionnaire

### 4

#### Description

side effects

#### Timepoint

Any time during treatment

#### Method of measurement

Baby Nurse Report

### 5

#### Description

Repeated use of anti-acid

#### Timepoint

First and second months of treatment

#### Method of measurement

Baby Nurse Report

## Intervention groups

### 1

#### Description

The intervention group are given quince syrup twice daily with ranitidine syrup for 4 weeks.

#### Category

Treatment - Drugs

### 2

#### Description

The placebo control group are given sugar syrup twice daily with ranitidine syrup for 4 weeks.

### Category

Placebo

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Gastrointestinal clinic of Ghaem Hospital in Mashhad

##### Full name of responsible person

Maryam Naeimi

##### Street address

Ghaem Hospital in Mashhad

##### City

Mashhad

##### Province

Razavi Khorasan

##### Postal code

9197613111

##### Phone

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##### Email

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## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Babol University of Medical Sciences

##### Full name of responsible person

Babol University of Medical Sciences

##### Street address

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##### City

Babol

##### Province

Mazandaran

##### Postal code

9197613111

##### Email

naeimima@yahoo.com

##### Grant name

##### Grant code / Reference number

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

Yes

##### Title of funding source

Babol 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

Babol University of Medical Sciences

#### Full name of responsible person

Maryam Naeimi

#### Position

Ph.D Student of Traditional Medicine

#### Latest degree

Medical doctor

#### Other areas of specialty/work

Traditional Medicine

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## Person responsible for scientific inquiries

### Contact

#### Name of organization / entity

دانشگاه علوم پزشکی بابل

#### Full name of responsible person

Narjes Gorji

#### Position

Assistant Professor, Faculty Member of Babol

#### Latest degree

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#### Other areas of specialty/work

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## Person responsible for updating data

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**Latest degree**

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**Other areas of specialty/work**

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**Web page address**

## 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**

Yes - There is 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**

Yes - There is a plan to make this available

**Analytic Code**

Yes - There is 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**

On the basis of the reliable questionnaire

**When the data will become available and for how long**

After article publication

**To whom data/document is available**

All people

**Under which criteria data/document could be used**

Published article according to Ph.D. thesis

**From where data/document is obtainable**

Babol university of medical sciences.timbabol@yahoo.com, 00981132194730

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

Library of Babol university of medical science

**Comments**