

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effect of *Althaea rosea* batching on bilirubin levels of neonates with hyperbilirubinemia

#### Protocol summary

##### Study aim

Determining the effect of bath with marshmallow on bilirubin level of neonates with jaundice

##### Design

The infants who meet the inclusion criteria will be selected and then, by drawing lots and using even and odd numbers, 30 infants will be placed in the intervention group (phototherapy and bath with marshmallow) and 30 infants will be placed in the control group (phototherapy).

##### Settings and conduct

In the neonatal ward of Ali Ibn Abi Talib Hospital in Rafsanjan

##### Participants/Inclusion and exclusion criteria

1- Jaundice based on the doctor's diagnosis and serum total bilirubin 13 mg / dL and above 2- Do not suffer from underlying diseases 3- Total serum bilirubin 16 mg per deciliter and above 4- No ABO or RH incompatibility, no G6PD enzyme disorder and no positive Coombs test 5- Absence of physical anomalies in physical examination 6- Does not have any risk factors such as hemolysis, sepsis, asphyxia 7- No history of skin allergies in family members or any allergies to marshmallows 8- Term baby (over 38 weeks) 9- Weight over 2500 kg

##### Intervention groups

Grind 5 grams of marshmallow and put it in a liter of cold water for 8 hours, then add the extract in a liter of water with a temperature of 37 to 37.5, which is continuously measured by a thermometer. The room temperature is between -28. Set to 24 ° C. Before starting phototherapy, the infant is bathed with marshmallow once a day for 5 days (5 to 7 minutes) and the infant's body temperature is monitored again. Will be placed).

##### Main outcome variables

Change in bilirubin level

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20210526051411N1**

Registration date: **2021-12-11, 1400/09/20**

Registration timing: **registered\_while\_recruiting**

Last update: **2021-12-11, 1400/09/20**

Update count: **0**

##### Registration date

2021-12-11, 1400/09/20

##### Registrant information

###### Name

Neda Rahimi

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 34 3247 4440

###### Email address

neda.rahimi90@yahoo.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2021-06-22, 1400/04/01

##### Expected recruitment end date

2021-12-22, 1400/10/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effect of *Althaea rosea* batching on bilirubin levels of neonates with hyperbilirubinemia

**Public title**

Effect of Althaea rosea batching on bilirubin levels of neonates with hyperbilirubinemia

**Purpose**

Supportive

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

Jaundice based on the doctor's diagnosis and serum total bilirubin 13 mg / dL and above Do not suffer from underlying diseases Total serum bilirubin 16 mg per deciliter and above No ABO or RH incompatibility, no G6PD enzyme disorder and no positive Coombs test Absence of physical abnormalities in physical examination Does not have any risk factors such as hemolysis, sepsis, asphyxia No history of skin allergies in family members or any allergies to marshmallows Term baby (over 38 weeks) Weight over 2500 kg

**Exclusion criteria:**

Increased jaundice that requires blood transfusion Withdrawal of the baby's parents to continue participating in the research Discharge or death of the infant before the end of the intervention period The baby becomes ill during the course of the disease and during the study, which for any reason contradicts the intervention.

**Age**

From **1 day** old to **10 days** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

- Participant
- Care provider
- Data analyser
- Data and Safety Monitoring Board

**Sample size**

Target sample size: **60**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

In the present study, first, neonates with icterus whose disease is approved by a doctor and are admitted to the neonatal ward of Ali Ibn Abitaleb Hospital in Rafsanjan will be identified. Then, in order to randomly assign the infants to the phototherapy and phototherapy groups with a marshmallow bath, a coin toss (milk line) will be used. . The coin toss results are then recorded on a note sheet. The doctor will also start the treatment based on the results.

**Blinding (investigator's opinion)**

Double blinded

**Blinding description**

The present study is two-blind so that both the baby's parents and the person collecting and analyzing the information of the type of intervention and in which group the baby is placed have no information. Newborns are admitted to different rooms.

**Placebo**

Not used

**Assignment**

Parallel

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

empty

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

Rafsanjan University of Medical Sciences

**Street address**

Nurse Street

**City**

Rafsanjan

**Province**

Kerman

**Postal code**

7718796755

**Approval date**

2020-11-28, 1399/09/08

**Ethics committee reference number**

IR.RUMS.REC.1399.201

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

jaundice

**ICD-10 code**

R17

**ICD-10 code description**

Unspecified jaundice

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

Bilirubin level

**Timepoint**

Before and after the study

**Method of measurement**

Photometry (by Juandice method)

**Secondary outcomes**

empty

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

For the intervention group, grind 5 grams of Althaea officinalis and put it in one liter of cold water for 8 hours, then take the flower extract with a strainer and then take

the extract in a liter of water with a temperature of 37 to 37.5, which is continuously measured by a thermometer. we will add. The room temperature is also set between 28-24 ° C. At the beginning of admission and before the start of phototherapy, the baby is bathed with .The baby is bathed by Althaea officinalis a trained person. The hands are thoroughly washed before the intervention. The baby's body temperature is also measured by the Beurer GmbH digital thermometer made in Germany. The baby's body is washed step by step in 5 to 7 minutes.First, the neck area, especially the area behind the baby's ears, then the chest and upper limbs, abdomen and lower limbs, and finally the baby's back will be washed. At the end, the baby's body is dried with a clean, soft towel and the baby's body temperature is checked again, and the baby is placed under phototherapy with the XHZ model (one week before the sampling of the devices are calibrated). Once an hour, according to the routine of the neonatal serum bilirubin section, it is measured by photometric method (Juandice method in the accredited laboratory of the same hospital and is continuously entered in the data collection and registration form.

**Category**

N/A

**2****Description**

Control group: In the control group, only phototherapy  
Phototherapy with XHZ device is performed routinely

**Category**

N/A

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

Neonatal ward of Ali Ibn Abi Talib Hospital in  
Rafsanjan

**Full name of responsible person**

Neda Rahimi

**Street address**

Ali Ibn Abi Talib Street

**City**

Rafsanjan

**Province**

Kerman

**Postal code**

7717937555

**Phone**

+98 34 3428 0001

**Email**

Aliebn@rums.ac.ir

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

Rafsanjan University of Medical Sciences

**Full name of responsible person**

Ali Shamsizadeh

**Street address**

Ali Ibn Abi Talib Street

**City**

rafsanjan

**Province**

Kerman

**Postal code**

7718796755

**Phone**

+98 34 3428 0097

**Email**

alishamsy@gmail.com

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

Yes

**Title of funding source**

Rafsanjan 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**

Other

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

Rafsanjan University of Medical Sciences

**Full name of responsible person**

Neda Rahimi

**Position**

Instructor of Nursing

**Latest degree**

Master

**Other areas of specialty/work**

Nursery

**Street address**

Nurse Street

**City**

Rafsanjan

**Province**

Kerman

**Postal code**

7718796755

**Phone**

34255900

**Email**

neda.rahimi90@yahoo.com

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Rafsanjan University of Medical Sciences

**Full name of responsible person**

Neda Rahimi

**Position**

Instructor of Nursing

**Latest degree**

Master

**Other areas of specialty/work**

Nursery

**Street address**

Nurse Street

**City**

Rafsanjan

**Province**

Kerman

**Postal code**

7718796755

**Phone**

34255900

**Email**

nedarahimi90@yahoo.com

## Person responsible for updating data

### Contact

**Name of organization / entity**

Rafsanjan University of Medical Sciences

**Full name of responsible person**

Neda Rahimi

**Position**

Instructor of Nursing

**Latest degree**

Master

## Other areas of specialty/work

Nursery

**Street address**

Nurse Street

**City**

Rafsanjan

**Province**

Kerman

**Postal code**

7718796755

**Phone**

34255900

**Email**

neda.rahimi90@yahoo.com

## 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