

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

02 Jul 2026

### Comparison of frequency of Natural vaginal delivery after preparation of cervix with evening primrose, EASI mechanical method and misoprostol in 41 week pregnant women

#### Protocol summary

##### Study aim

Determining the frequency of normal delivery after using three groups of evening primrose, mechanical and misoprostol in 41-week pregnant women hospitalized in Fatemeh Hospital in 1401

##### Design

A clinical trial of three groups, with parallel groups, randomized by random block allocation method, phase 3 on 420 pregnant women of 41 weeks.

##### Settings and conduct

Informed consent will be obtained from patients. After entering the delivery room, the patients undergo a vaginal examination and Bishop's score is calculated and then they are included in one of the three groups randomly. In the evening primrose group, one 1000 mg evening primrose capsule from Dana Pharmaceutical Company is prescribed vaginally every hour. Evening primrose is used until the beginning of the active phase of labor (exam 3-4 cm). In the mechanical group, using the Extra amniotic saline infusion method, a cervical Foley catheter is inserted and 30 cc of normal saline is injected per hour, and after inserting the balloon, the balloon is allowed to come out for a maximum of 12 hours. Then, in the third group of patients, misoprostol suppository 25 are placed vaginally. Bishop's score is determined every two hours in all three groups.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Primiparous women at 41 weeks are candidates for termination of pregnancy by natural delivery Exclusion Criteria: Patients with active labor phase Patients with spontaneous onset of pain Not having an emergency delivery indication

##### Intervention groups

The effect of three methods (evening flower, mechanical method and misoprostol) in the delivery process of primiparous pregnant mothers is investigated. Pregnant mothers are randomly divided into 3 groups.

#### Main outcome variables

Comparison of natural birth process, labor duration, side effects and condition of the baby in three groups of evening primrose, mechanical and misoprostol.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20230522058253N1**

Registration date: **2023-06-16, 1402/03/26**

Registration timing: **prospective**

Last update: **2023-06-16, 1402/03/26**

Update count: **0**

##### Registration date

2023-06-16, 1402/03/26

##### Registrant information

##### Name

neda alimohammadi

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 81 3838 0808

##### Email address

nalimohamadi68@yahoo.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2023-07-23, 1402/05/01

##### Expected recruitment end date

2023-11-22, 1402/09/01

##### Actual recruitment start date

empty

**Actual recruitment end date**  
empty

**Trial completion date**  
empty

**Scientific title**  
Comparison of frequency of Natural vaginal delivery after preparation of cervix with evening primrose, EASI mechanical method and misoprostol in 41 week pregnant women

**Public title**  
A comparative study of the effect of evening primrose, EASI mechanical method and misoprostol in Natural Vaginal Delivery

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Primiparous women at 41 weeks are candidates for termination of pregnancy by natural delivery method  
**Exclusion criteria:**  
Pregnant women with IUFD, SGA, IUGR Pregnant women with spotting and abnormal placenta

**Age**  
No age limit

**Gender**  
Female

**Phase**  
3

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **420**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
Patients will be consulted upon entering the hospital and informed consent will be obtained from the patient. After entering the delivery room, they undergo a vaginal examination and Bishop's score is calculated, and then they are included in one of the three groups randomly. Randomization is done by writing the letters A, B and C on three sheets and putting them in a box, and one of these sheets is taken out by the researcher for each patient. After completion, again for the next three patients, sheets will be removed with this random method until we reach the desired sample size.

**Blinding (investigator's opinion)**  
Not blinded

**Blinding description**

**Placebo**  
Not used

**Assignment**  
Parallel

**Other design features**

**Secondary Ids**  
empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of hamadan University of Medical Sciences

##### Street address

Fatemieh hospital, Pastaran Ave.

##### City

hamadan

##### Province

Hamadan

##### Postal code

6517789971

#### Approval date

2023-01-28, 1401/11/08

#### Ethics committee reference number

IR.UMSHA.REC.1401.942

## Health conditions studied

### 1

#### Description of health condition studied

Comparison of frequency of Natural vaginal delivery after preparation of cervix with evening primrose, EASI mechanical method and misoprostol in 41 wee

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

Bishop's scoring system

#### Timepoint

Two hours after using misoprostol and the EASI mechanical method and evening primrose

#### Method of measurement

Bishop's scoring system to check cervix inducibility

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group1: in the evening primrose group, one 1000 mg evening primrose capsule from Dana Pharmaceutical Company is prescribed vaginally every hour. Evening primrose is used until the beginning of the active phase of labor (exam 3-4 cm).

#### Category

Treatment - Drugs

## 2

### Description

Intervention group2: In the mechanical group, using the Extra amniotic saline infusion method, a Foley cervical catheter is inserted and 30 cc of normal saline is injected per hour, and after the balloon is inserted, the balloon is allowed to come out for a maximum of 12 hours.

### Category

Treatment - Devices

## 3

### Description

Intervention group3: Misoprostol suppository 25 micrograms is placed vaginally.

### Category

Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

**Name of recruitment center**

Fatemieh Hospital

**Full name of responsible person**

Sima Kamkar

**Street address**

Pastaran Ave

**City**

Hamadan

**Province**

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**Postal code**

6517789971

**Phone**

+98 81 3828 3939

**Email**

nalimohamadi68@yahoo.com

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**

Hamedan University of Medical Sciences

**Full name of responsible person**

Reza Shokuhi

**Street address**

Pastaran Ave, Hamedan University of Medical Sciences

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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**

Hamedan 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**

Hamedan University of Medical Sciences

**Full name of responsible person**

Sima Kamkar

**Position**

Assistant Professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Gynecology and Obstetrics

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## Person responsible for scientific inquiries

#### Contact

**Name of organization / entity**

Hamedan University of Medical Sciences

**Full name of responsible person**

Sima Kamkar

**Position**

Assistant Professor

**Latest degree**

Specialist

**Other areas of specialty/work**

Gynecology and Obstetrics

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## Person responsible for updating data

### Contact

**Name of organization / entity**  
Hamedan University of Medical Sciences  
**Full name of responsible person**  
Neda Alimohammadi  
**Position**  
Nurse-Nicu  
**Latest degree**  
Master  
**Other areas of specialty/work**  
Nursery  
**Street address**  
Pastaran Ave- Fatemieh Hospital  
**City**  
Hamadan  
**Province**

## 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

Not applicable

### 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

Not applicable

### Data Dictionary

Not applicable