

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

27 May 2026

### Comparison of Oral Misoprostol Tablets and Oxytocin for the Induction of Labor in Premature Rupture of Membranes

#### Protocol summary

##### Study aim

Comparison of the efficacy of oral misoprostol and intravenous oxytocin in inducing labor in rupture of premature embryonic membranes

##### Design

The study will be a clinical trial involving 160 pregnant mothers who have ruptured premature embryonic membranes between 34 and 42 weeks of gestation and will be referred to Mahdiah Hospital. After definitive diagnosis of placental rupture in speculum or positive fern test, patients are randomly divided into two groups for induction of labor. The case group will be given 50 micrograms of misoprostol orally every 4 hours up to a maximum of 5 doses. In the control group, oral placebo and intravenous oxytocin in ringer serum will be administered at a dose of 2ml / min and will be performed every 2 minutes up to 40ml / min.

##### Settings and conduct

The study will be a clinical trial involving 160 pregnant mothers who have ruptured premature embryonic membranes between 34 and 42 weeks of gestation and will be referred to Mahdiah Hospital. After definitive diagnosis of placental rupture in speculum or positive fern test, patients are randomly divided into two groups for induction of labor.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Positive Fern test Gestational age between 34 and 42 weeks Single pregnancy Cephalic presentation

##### Intervention groups

Pregnant mothers who have ruptured premature embryonic membranes between 34 and 42 weeks of gestation, After definitive diagnosis of placental rupture in speculum or positive fern test, patients are randomly divided into two groups for induction of labor. The case group will be given of misoprostol orally . In the control group, will be given oral placebo and intravenous oxytocin.

##### Main outcome variables

Induction of labor with misoprostol, induction of oxytocin, first and fifth minute apgar, postpartum hemorrhage, complications of misoprostol

#### General information

##### Reason for update

##### Acronym

مقایسه اثر میزوپروستول خوراکی و اکسی توسین وریدی در القا زایمان

##### IRCT registration information

IRCT registration number: **IRCT20191014045106N1**

Registration date: **2020-02-19, 1398/11/30**

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

Last update: **2020-02-19, 1398/11/30**

Update count: **0**

##### Registration date

2020-02-19, 1398/11/30

##### Registrant information

##### Name

maryam mohammadi

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 21 7748 3253

##### Email address

dr.maryam671@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2019-11-22, 1398/09/01

##### Expected recruitment end date

2020-11-21, 1399/09/01

##### Actual recruitment start date

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Comparison of Oral Misoprostol Tablets and Oxytocin for the Induction of Labor in Premature Rupture of Membranes

**Public title**

Comparison of Oral Misoprostol Tablets and Oxytocin for the Induction of Labor in Premature Rupture of Membranes

**Purpose**

Treatment

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

Definitive diagnosis of rupture of the sacrotuberous ligament on examination with speculum or positive fern test  
Gestational age between 34 and 42 weeks  
Cephalic presentation  
Bishop score  $\leq 5$   
Indication of vaginal termination of pregnancy  
Parity less than five  
Absence of active labor  
Absence of active labor

**Exclusion criteria:**

The presence of any fetal heart rate abnormalities  
A history of cesarean section or uterine scarring  
Contraindications for vaginal delivery such as placenta previa  
Known allergy to prostaglandin (skin manifestations, hives, rash, shortness of breath, cough, chest pain and blurred vision after previous prostaglandin use)  
Estimated baby weight over 4 kg  
Active labor means at least 3 contractions with sufficient force and duration of at least 40 seconds within 10 minutes.  
Active cardiovascular disease, asthma, glaucoma  
Vaginal bleeding

**Age**

No age limit

**Gender**

Female

**Phase**

3

**Groups that have been masked**

No information

**Sample size**

Target sample size: **160**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

This study was a clinical trial involving 160 pregnant mothers, ranging from 34 to 42 week. Pregnancy is referred to premature rupture of the membrane and go to Mahdih Hospital. Will do, it will be done. cervical examination and Bishop score and description. It will be done. After definitive diagnosis of premature rupture in speculum or positive fern test, patients are randomly divided into two groups for induction of labor.

**Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Used

**Assignment**

Parallel

**Other design features****Secondary IDs**

empty

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

Ethics committee of Shahid Beheshti University of Medical Sciences

**Street address**

Shahid Beheshti University of Medical Sciences, Arabi Ave, Daneshjoo Blvd, Velenjak, Chamran highway, Tehran, Iran. 7th Floor, Bldg No.2 .

**City**

Tehran

**Province**

Tehran

**Postal code**

19839-63113

**Approval date**

2019-09-04, 1398/06/13

**Ethics committee reference number**

IR.SBMU.MSP.REC.1398.533

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

Labor in premature rupture of fetal protective membranes

**ICD-10 code**

Z00.12

**ICD-10 code description**

Encounter for routine child health examination

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

Age

**Timepoint**

Baseline

**Method of measurement**

questionnaire

**2****Description**

Pregnancy age

**Timepoint**

Baseline

**Method of measurement**

questionnaire

### 3

**Description**

Delivery time

**Timepoint**

During delivery

**Method of measurement**

questionnaire

### 4

**Description**

First and fifth minute appgar

**Timepoint**

First and fifth minute

**Method of measurement**

Based on Appgar score determination by examiner

### 5

**Description**

Postpartum hemorrhage

**Timepoint**

Immediately after delivery

**Method of measurement**

View by examiner / Yes, No

### 6

**Description**

Excretion of neonatal meconium

**Timepoint**

After birth

**Method of measurement**

View by examiner / Yes, No

## Secondary outcomes

### 1

**Description**

Side Effects Of Misoprostol

**Timepoint**

Postpartum

**Method of measurement**

Question about person / fever, nausea, Vomiting, diarrhea

## Intervention groups

### 1

**Description**

Intervention group: The case group will be given 50 micrograms of misoprostol orally every 4 hours up to a maximum of 5 doses.

**Category**

Treatment - Drugs

### 2

**Description**

Control group: In the control group, oral placebo and

intravenous oxytocin in ringer serum will be started at a dose of 2mlu / min and will be performed every 2 minutes up to 40mlu / min.

**Category**

Placebo

## Recruitment centers

### 1

**Recruitment center****Name of recruitment center**

Mahdieh Hospital

**Full name of responsible person**

Maryam Mohammadi

**Street address**

Boroujerdi Street

**City**

Tehran

**Province**

Tehran

**Postal code**

1234567890

**Phone**

+98 21 5506 2644

**Email**

dr.maryam671@gmail.com

## Sponsors / Funding sources

### 1

**Sponsor****Name of organization / entity**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Ashin Zarghi

**Street address**

Mahdieh Hospital, Boroujerdi Street

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dr.maryam671@gmail.com

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

Yes

**Title of funding source**

Shahid Beheshti 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**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Maryam Mohammadi

**Position**

Assistant

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Gynecology and Obstetrics

**Street address**

Mahdieh Hospital, Boroujerdi Street

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

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

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**Position**

Medical resident

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Gynecology and Obstetrics

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**Person responsible for updating data****Contact****Name of organization / entity**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Maryam Mohammadi

**Position**

Assistant

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Gynecology and Obstetrics

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1185817311

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+98 912 404 1719

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dr.maryam671@gmail.com

**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**

Yes - There is 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**

Comparison of Oral Misoprostol Tablets and Oxytocin for the Induction of Labor in Premature Rupture of Membranes, All of its results can be used to manage diseases.

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

Access 5 months after the results are published

**To whom data/document is available**

Academic and scientific researchers

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

Management and Medical Care

**From where data/document is obtainable**

Mahdieh Hospital or Shahid Beheshti University of Medical Sciences

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

In a Written Letter to the Documentation Authorities of Mahdie Hospital of Shahid Beheshti Medical University

**Comments**