

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

27 Jul 2026

### Comparison of the effect of vaginal misoprostol alone and vaginal misoprostol simultaneously with laminaria in induction of second trimester pregnancy (14-20 weeks) in patients referred to Imam Ali Hospital's Hospital (Clinical Practice)

#### Protocol summary

##### Study aim

This study is performed to determine the effect of vaginal misoprostol with laminaria in comparison with vaginal misoprostol alone in termination of pregnancy of the second trimester of pregnancy (14 to 20 weeks).

##### Design

Clinical trial with parallel control groups, one blind, randomized, On 90 patients referring to the maternity of Ali ibn Abi Talib hospital, which are 14 to 20 weeks pregnant and are a candidate for termination of pregnancy.

##### Settings and conduct

In the intervention group, the Laminaria will be inserted into the cervix. Then, at the same time, the misoprostol suppository contains 400 micrograms in the posterior Fornix of the vagina and examines the patient every 8 hours, and if we do not pass the fetus after 8 hours, we will repeat the vaginal misoprostol. . This process continues for up to 6 doses and, if not eliminated, until then, surgery is used to terminate the pregnancy. In the control group, misoprostol suppository 400 micrograms will be prescribed, According to the intervention group.

##### Participants/Inclusion and exclusion criteria

Entry requirements: Pregnant women between the weeks 14-20 weeks of pregnancy admitted to Imam Ali Hospital who are candidates for termination of pregnancy due to severe anomalies or fetal death. Single-swelling conditions, parietal 1 to 3, painless and uterine infections  
Non-arrival conditions: Allergy to medications, taking anticoagulants and corticosteroids, having some special diseases, history of previous anesthetic on the uterus, parity of more than three, Peruvian pairs, and more.

##### Intervention groups

In the first group, Laminaria is inserted into the cervix. Together with 400 micrograms of vaginal progesterone

every 8 hours to 6 times and another 400 micrograms of vaginal progesterone every 8 hours to 6 times.

##### Main outcome variables

The average need for curettage, Labor time, Hospital admission time after termination of pregnancy.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20190529043759N1**

Registration date: **2019-07-07, 1398/04/16**

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

Last update: **2019-07-07, 1398/04/16**

Update count: **0**

##### Registration date

2019-07-07, 1398/04/16

##### Registrant information

##### Name

Fatemeh Behnood

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 54 3329 5570

##### Email address

dr.f.behnood@zaums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2019-06-22, 1398/04/01

**Expected recruitment end date**

2020-04-20, 1399/02/01

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Comparison of the effect of vaginal misoprostol alone and vaginal misoprostol simultaneously with laminaria in induction of second trimester pregnancy (14-20 weeks) in patients referred to Imam Ali Hospital's Hospital (Clinical Practice)

**Public title**

The Effect of Laminaria with Vaginal Misoprostol on Cervical Preparation in Induction of Second Trimester Abortion

**Purpose**

Treatment

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

Pregnant women between 14-20 weeks of pregnancy at Imam Ali Hospital who are candidates for termination of pregnancy due to severe anomalies or due to fetal death Singleton conditions, parity 1 to 3, painless and uterine infections

**Exclusion criteria:**

Allergy to the drug parity of more than three severe anemia active liver disease cardiovascular disease uncontrolled seizures having IUD Placenta Previa History of cesarean section previous incision on the uterus Use of corticosteroids Use of anti coagulants

**Age**

No age limit

**Gender**

Female

**Phase**

3

**Groups that have been masked**

- Participant
- Outcome assessor

**Sample size**

Target sample size: 90

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Accidental assignment to intervention and control groups. To minimize the potential confounding effects, all participants with all the conditions for entry into the study will be randomized. Randomized blocked sampling will be based on gradual referral of eligible samples.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

Since the therapist is aware of the type of treatment and Laminaria and Misoprostol should be examined by the therapist for several hours, it is a blind side effect and patients are unaware of the treatment. We also use an

assessment that does not know the treatment of the groups and we ask the evaluator for the statistics to get the statistics.

**Placebo**

Not used

**Assignment**

Parallel

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

empty

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

Ethics Committee of Zahedan University of Medical Sciences

**Street address**

Ali Ebn Abitaleb Hospital, Persian Gulf Expressway

**City**

Zahedan

**Province**

Sistan-va-Balouchestan

**Postal code**

9816743463

**Approval date**

2018-05-15, 1397/02/25

**Ethics committee reference number**

IR.ZAUMS.REC.1398.078

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

Medical abortion

**ICD-10 code**

O04

**ICD-10 code description**

Complications following (induced) termination of pregnancy

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

Termination of pregnancy

**Timepoint**

Every eight hours to six times

**Method of measurement**

dilatation of cervix and contraction

**Secondary outcomes**

## 1

### Description

Need for curettage

### Timepoint

From the start, every eight hours to six turns

### Method of measurement

Clinical examinations

## 2

### Description

Abortion time in labor

### Timepoint

Interval between administration of drug and expulsion of fetus

### Method of measurement

Record time

## 3

### Description

Time of admission in hospital after abortion

### Timepoint

From the time of the abortion to the patient's discharge

### Method of measurement

Record time

## Intervention groups

## 1

### Description

Intervention group: Embedding of Laminaria In the cervix with 400 µg Misoprostol Vaginally every 8 hours, up to 48 hours

### Category

Treatment - Drugs

## 2

### Description

Control group: 400 µg Misoprostol Vaginally every 8 hours, up to 48 hours

### Category

Treatment - Drugs

## Recruitment centers

## 1

### Recruitment center

#### Name of recruitment center

Ali Ibn Abi Taleb Hospital

#### Full name of responsible person

Fatemeh Behnood

#### Street address

Persian Gulf Highway, Salamat Blvd., Ali Ibn Abi Taleb Hospital

#### City

Zahedan

#### Province

Sistan-va-Balouchestan

#### Postal code

9816743463

#### Phone

+98 54 3329 5570

#### Email

dr.f.behnood@zaums.ac.ir

## Sponsors / Funding sources

## 1

### Sponsor

#### Name of organization / entity

Zahedan University of Medical Sciences

#### Full name of responsible person

Dr. Noor Mohammad Bakhshani

#### Street address

Deputy of Research and Technology, Student Scientific Research Center, University of Medical Sciences campus, Dr. Hesabi Square, Zahedan

#### City

Zahedan

#### Province

Sistan-va-Balouchestan

#### Postal code

9816743463

#### Phone

+98 54 3329 5796

#### Email

Msrc@zamus.ac.ir

#### Web page address

<http://msrc.zaums.ac.ir/>

#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

Zahedan 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

Zahedan University of Medical Sciences

#### Full name of responsible person

Fatemeh Behnood

#### Position

Assistant Professor

#### Latest degree

Medical doctor

**Other areas of specialty/work**

Gynecology and Obstetrics

**Street address**

Persian Gulf Highway, Slamat Blvd., Ali Ibn Abi Talib Hospital

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

Zahedan University of Medical Sciences

**Full name of responsible person**

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**Position**

Assistant Professor

**Latest degree**

Medical doctor

**Other areas of specialty/work**

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

Zahedan University of Medical Sciences

**Full name of responsible person**

Fatemeh Behnood

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Assistant Professor

**Latest degree**

Medical doctor

**Other areas of specialty/work**

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**Fax****Email**

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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**

Not applicable

**Informed Consent Form**

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

**Clinical Study Report**

Not applicable

**Analytic Code**

Not applicable

**Data Dictionary**

Not applicable