

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### **A Comparative investigation of the effect of oral castor oil capsules and evening primrose oil before induction on Bishop's score, the success of induction, and some outcomes of labor in women referred to the Niknafs maternity hospital of Rafsanjan city**

#### **Protocol summary**

##### **Study aim**

Determination and Comparative investigation of the effect of oral castor oil capsules and evening primrose oil before induction on Bishop's score, the success of induction and some outcomes of labor in women referred to the Niknafs Maternity hospital of Rafsanjan city in 2019

##### **Design**

Randomized clinical trial, phase 3, 100 samples with two intervention groups, without control group, triple-blind.

##### **Settings and conduct**

This study is a triple-blind randomized clinical trial based on Bishop's score and number of normal vaginal delivery. The first intervention group will receive two Prime rose capsules (oral,1000 mg, daily) and the second intervention group will receive six Gylax capsules (oral,1000 mg) at the time of induction. The location of this study is NickNafs Rafsanjan maternity hospital.

##### **Participants/Inclusion and exclusion criteria**

Inclusion criteria: Willingness to participate in the study; Compete Inform consent ; Mother age of 18-35 years ; Normal amniotic cyst; Normal ECG in the fetus ; Lack of labor contraction; Low-risk pregnancies such as lack of a (placenta previa, diabetes, preeclampsia, decreased fetal movement, reduced amniotic fluid ...) ; Single-fetus with a cephalic presentation based on the latest ultrasound results; Bishop score less than 6; Negative past medical history of known chronic diseases; Persian Race  
Exclusion criteria: The need for emergency intervention for maternal or fetal reasons before induction; Birth weight less than 2500 and above 4000 grams

##### **Intervention groups**

The first intervention group will receive two Prime rose capsules (oral,1000 mg, daily) and the second intervention group will receive six Gylax capsules (oral,1000 mg) at the time of induction.

##### **Main outcome variables**

The mean Bishop score, Success of labor induction

#### **General information**

##### **Reason for update**

##### **Acronym**

##### **IRCT registration information**

IRCT registration number: **IRCT20190717044248N3**

Registration date: **2020-10-15, 1399/07/24**

Registration timing: **retrospective**

Last update: **2020-10-15, 1399/07/24**

Update count: **0**

##### **Registration date**

2020-10-15, 1399/07/24

##### **Registrant information**

##### **Name**

Zahra Saghafi

##### **Name of organization / entity**

##### **Country**

Iran (Islamic Republic of)

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##### **Recruitment status**

**Recruitment complete**

##### **Funding source**

##### **Expected recruitment start date**

2019-11-11, 1398/08/20

##### **Expected recruitment end date**

2020-08-10, 1399/05/20

##### **Actual recruitment start date**

empty  
**Actual recruitment end date**  
empty  
**Trial completion date**  
empty

**Scientific title**  
A Comparative investigation of the effect of oral castor oil capsules and evening primrose oil before induction on Bishop's score, the success of induction, and some outcomes of labor in women referred to the Niknafs maternity hospital of Rafsanjan city

**Public title**  
A Comparative investigation of the effect of oral castor oil capsules and evening primrose oil before induction on Bishop's score, the success of induction, and some outcomes of labor

**Purpose**  
Treatment

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Willingness for participant in the study  
Willingness to normal vaginal delivery  
Mother age between 18-35 years  
Normal amniotic cyst  
Normal ECG of fetus  
No labor contraction  
Low risk pregnancy  
Single-fetus  
Cephalic presentation based on the latest ultrasound results  
Bishop score less than 6  
Iranian race

**Exclusion criteria:**  
Contraindications of Gelax consumption  
Sensitivity to Gelax capsules  
known history of psychological illness  
Delivery complications such as polyhydramnios, oligohydramnios, preeclampsia, eclampsia, vaginal bleeding  
History of having confirmed psychological disorders  
The need for emergency intervention for maternal or fetal reasons before induction  
Birth weight less than 2500 and above 4000 grams  
Having labor contractions

**Age**  
From **18 years** old to **35 years** old

**Gender**  
Female

**Phase**  
3

**Groups that have been masked**

- Participant
- Care provider
- Investigator
- Outcome assessor
- Data analyser
- Data and Safety Monitoring Board

**Sample size**  
Target sample size: **100**

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

**Randomization description**  
Random classification by minimization method: Among those who refer to the maternity hospital to induce labor, people who have the inclusion criteria, Will be selected as a research sample. In order to allocate individuals to groups A or B, the first person in each of the quadrupled

stratums will be randomly entered into the study by flip a coin. To allocate the next samples to groups A or B, the sum of the number of samples, ie the number of pregnancies and the bishop score, is considered in the quadrupled stratums, and the next sample will belong to the class that has the least sum. If the samples are equal in stratums, the same routine flip a coin will be repeated.

**Blinding (investigator's opinion)**  
Triple blinded

**Blinding description**  
In order to be blind in this study, the pharmacist will put the medicines of groups A and B in the same-shape (uniform) packages and the prescription will be placed inside each package. The researcher will not know the type of medicines in these two groups. At first, the participants will be given the necessary explanations for participation and informed consent will be obtained, but the participants will not know in which group (castor oil or evening primrose oil) they will be placed. The medicine will be given to participants as groups A or B. Blinding will be performed for the statistical analyzer. After completing the statistical analysis, the pharmacist will be asked about the type of medicines of groups A or B. The clinician will not know which medicine belongs to group A or B. Vaginal examination will be performed by a clinical caregiver and the bishop score will be determined and participants will be referred to another research colleague for medication. The medicine will be given to the participant according to the number of pregnancies and bishop score with the minimization method. In the next step, the clinical caregiver who does not know about the groups of the medicines will perform the examinations two and four hours later and will record it in the file. The other research colleague will complete the checklist according to the file.

**Placebo**  
Not used

**Assignment**  
Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

#### **Ethics committee**

##### **Name of ethics committee**

Ethics committee of Rafsanjan University of Medical Sciences

##### **Street address**

Emam Ali Blvd, Rafsanjan

##### **City**

Rafsanjan

##### **Province**

Kerman

##### **Postal code**

7717933777

##### **Approval date**

2019-11-08, 1398/08/17

**Ethics committee reference number**

IR.RUMS.REC.1398.121

**Health conditions studied**

**1**

**Description of health condition studied**

Normal vaginal delivery

**ICD-10 code**

**ICD-10 code description**

**Primary outcomes**

**1**

**Description**

The mean of Bishop's score

**Timepoint**

Determination of Bishop score before induction, two and four hours after induction

**Method of measurement**

The Bishop score table, which has five criteria including dilatation, effacement, fetal head station, softness, and position of the cervix during a vaginal examination. for scoring each of the first three criteria, take a score of 3-0, and each of the next two criteria, take a score of 2-0.

**Secondary outcomes**

**1**

**Description**

The duration of the first stage of labor

**Timepoint**

From the onset of the active phase of labor to the complete opening of the cervix (measurements were taken every hour).

**Method of measurement**

Use checklist (written in the checklist every hour).

**Intervention groups**

**1**

**Description**

The first intervention group will receive two Prime rose capsules (oral,1000 mg, daily) made by Barich Essence Company, before induction.

**Category**

Treatment - Drugs

**2**

**Description**

The second intervention group will receive six Gylax capsules (oral,1000 mg) at the time of induction made by Barich Essence Company.

**Category**

Treatment - Drugs

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Nik Nafs maternity center of Rafsanjan

**Full name of responsible person**

Leila Norouzian

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21th Bostan Alley, Panzdah-e-Khordad Ave.

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**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Rafsanjan University of Medical Sciences

**Full name of responsible person**

Ali Shamsizadeh

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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**

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**

Academic

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

Rafsanjan University of Medical Sciences

**Full name of responsible person**

Mahdiyehsadat Hoseinipour

**Position**

Midwifery

**Latest degree**

Bachelor

**Other areas of specialty/work**

Midwifery

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**Full name of responsible person**

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Rafsanjan

**Province**

Kerman

**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

No - There is not a plan to make this available

**Justification/reason for indecision/not sharing IPD**

Confidentiality of informations

**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