Clinical Trial Protocol
Iranian Registry of Clinical Trials

14 Oct 2026

A Comparative Study of the Efficacy of Proximal vs. Distal Acupressure Points on Labor Pain Intensity During the First Stage

Protocol summary

Study aim
Determining and comparing the effectiveness of acupressure of points close to the pain focus (BL31, BL32, BL33) versus distant points (GB21, LI4, SP6) on the intensity of pain in the first stage of labor in pregnant women

Design
A randomized controlled clinical trial in which 105 pregnant women will participate in three groups, and the website (https://www.sealedenvelope.com/simple-randomiser/v1/lists) will be used to randomly assign primiparous and multiparous women to the three groups.

Settings and conduct
In this research, all primiparous and multiparous pregnant women referred to the delivery block of Mahdieh Hospital in Tehran.

Participants/Inclusion and exclusion criteria
Inclusion criteria: - Age between 18-35 years - Number of miscarriages less than two - No history of more than two deliveries. - Skin areas where acupressure is to be performed are healthy. - Gestational age between 37-42 weeks (ultrasound before 12 weeks with LMP) - Singleton, vertex presentation - Dilation of 4-5 cm (at the beginning of the active phase of labor) - Presence of at least three contractions in 10 minutes Exclusion criteria: - Mother's unwillingness to continue participating in the study - Emergency cesarean section (after registration) - Failure to complete the three stages of the intervention - Use of pharmacological pain relief during the intervention - Occurrence of adverse outcomes (placental abruption, fetal distress, failure to progress labor) (after registration)

Intervention groups
Acupressure group points close to (BL31, BL32, BL33) pain focus / Acupressure group points far from (SP6, LI4, GB21) pain focus

Main outcome variables
Pain relief during the first stage of labor

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190205042624N2**
Registration date: **2026-08-09, 1405/05/18**
Registration timing: **prospective**

Last update: **2026-08-09, 1405/05/18**
Update count: **0**

Registration date
2026-08-09, 1405/05/18

Registrant information

Name
Sedigheh Sedigh Mobarakabadi

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 21 8865 5366

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Recruitment status
recruiting

Funding source

Expected recruitment start date
2026-08-23, 1405/06/01

Expected recruitment end date
2027-01-20, 1405/10/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title

A Comparative Study of the Efficacy of Proximal vs. Distal Acupressure Points on Labor Pain Intensity During the First Stage

Public title

A Comparative study of the effectiveness of acupressure on Labor Pain Intensity During the First Stage

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age between 18-35 years Number of miscarriages less than two Have no history of more than two deliveries. Skin areas where acupressure is to be performed are healthy. Gestational age between 37-42 weeks (ultrasound before 12 weeks with LMP) Singleton, vertex presentation Dilation of 4-5 cm (at the beginning of the active phase of labor) Presence of at least three contractions in 10 minutes Cephalopelvic disproportion No use of analgesic drugs (chemical or herbal) in the past 8 hours. Not having a chronic disease such as cardiovascular disease, kidney disease, rheumatoid arthritis, and epilepsy No known mental illness No history of adverse events such as the death of a spouse or a close relative during pregnancy No pregnancy complications such as preeclampsia, chorioamnionitis, etc. No obstetric complications (such as abruption, abnormal fetal heart rate, etc.) at the time of entry into the study

Exclusion criteria:

Mother's unwillingness to continue participating in the study Emergency cesarean section (after registration) Failure to complete the three stages of the intervention Use of pharmacological pain relief during the intervention Occurrence of adverse outcomes (placental abruption, fetal distress, failure to progress labor) (after registration)

Age

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

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **105**

Randomization (investigator's opinion)

Randomized

Randomization description

The website (https://www.sealedenvelope.com/simple-randomiser/v1/lists) will be used to randomly assign primiparous and multiparous women to three groups. In this way, before the start of the study, 105 people will be randomly assigned in blocks of 3, 6, and 3 in two primiparous and multiparous classes to three acupressure groups: near, far, and control. White envelopes will be provided for the primiparous class and green envelopes for the multiparous class. One envelope will be numbered from 1 to 52 and the other from 1 to 53, and the groups will be recorded and entered into the envelope based on the determined sequence. The sealed envelopes will be provided to the researcher conducting the intervention before the study. In this way, the researcher conducting the study will be unaware of the assignment of individuals to groups before the intervention.

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

Research Ethics Committee of School of Pharmacy and Nursing & Midwifery- Shahid Beheshti University

Street address

Next to Taleghani hospital; SHahid Arabi Ave, Yaman street; SHahid CHamran highway

City

Tehran

Province

Tehran

Postal code

19839-63113

Approval date

2026-07-21, 1405/04/30

Ethics committee reference number

IR.SBMU.PHARMACY.REC.1405.112

Health conditions studied

1

Description of health condition studied

Pain relief during the first stage of labor

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Pain relief during the first stage of labor

Timepoint

The intervention is applied at dilations of 4-5, 6-7, and 8-10 cm and for 9 minutes.

Method of measurement

The level of labor pain is determined using a numerical rating scale before intervention.

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Acupressure is applied to points close to the pain focus (BL31, BL32, BL33) at dilations of 4-5, 6-7, and 8-10 cm for 9 minutes.
Category
Treatment - Other

2

Description
Intervention group: Acupressure is applied to points distant from the pain focus (SP6, LI4, GB21) at dilations of 4-5, 6-7, and 8-10 cm for 9 minutes.
Category
Treatment - Other

3

Description
Control group: The researcher is present in the delivery room, and all the measures that were performed for the intervention groups, except for acupressure, are also performed for the control group.
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Mahdieh hospital, Tehran
Full name of responsible person
Nayreh Rahmati
Street address
Tehran - Shusha Square - Fedayan Islam Street - Shishegar Khaneh Street - Rajab Nia Street
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Afshin Zarghi
Street address
Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Niayesh Highway, Vali-asr Street
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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
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
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Position
Assistant professor
Latest degree
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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
Some part our spss data dystroied
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
No - There is not a plan to make this available
Informed Consent Form
No - There is not a plan to make this available
Clinical Study Report
No - There is not a plan to make this available
Analytic Code
No - There is not a plan to make this available
Data Dictionary
No - There is not a plan to make this available