

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Evaluation of the effectiveness of maternal lunge position during labor on rotation of posterior fetal occipital position and delivery outcome

Protocol summary

Study aim

Supportive care

Design

Clinical trial with control group, with parallel groups, no blinding performed, randomization performed, 216 samples, By random block method and using 6 blocks

Settings and conduct

Sina hospital karoon

Participants/Inclusion and exclusion criteria

Gestational age $\geq$ 37 weeks Fetal head's position is to be posterior occipital with the approval of ultrasound
Pregnancy is to be singleton Maternal age's range is to be 18-40 BMI is to be 18-30 Mother is to be at the onset of the labor pains and at the beginning of the active phase of labor (Dilatation $\geq$ 4 cm)

Intervention groups

To ensure that each person's group is not disclosed, the allocation will be hidden by assigning unique codes to each of the subjects and placing them in dark envelopes. The subjects in the intervention group, in addition to receiving routine midwifery care (examination, vital signs check, hearing of fetal heartbeat) until the time of delivery, were alternately in the lunge position for a period of 15 to 20 minutes per hour. The lung position refers to a position in which one of the legs is bent while standing and the floor is placed on a chair or a high level and the sole of the other foot is on the ground. Also, this position is such that the sole of one foot is on the ground and the knee of the other foot is on the ground in a position similar to squatting. In this position, the upper leg is located on the same side of the posterior occiput of the fetus. the control group will receive routine care.

Main outcome variables

Duration of active phase and second stage of labor:
Labor Pain intensity: Type of delivery: Apgar score:
Frequency use of oxytocin during normal labor: Mother satisfaction from delivery: Frequency use of episiotomy:
Frequency of third and fourth-degree perineal lacerations: Fetal head position at birth

General information

Reason for update

Acronym

OP- occiput posterior

IRCT registration information

IRCT registration number: **IRCT20220306054201N1**

Registration date: **2022-05-01, 1401/02/11**

Registration timing: **prospective**

Last update: **2022-05-01, 1401/02/11**

Update count: **0**

Registration date

2022-05-01, 1401/02/11

Registrant information

Name

maryam hamidi

Name of organization / entity

Country

Iran (Islamic Republic of)

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+98 936 966 7076

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mhamiddi76@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-05-20, 1401/02/30

Expected recruitment end date

2022-09-21, 1401/06/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the effectiveness of maternal lunge position during labor on rotation of posterior fetal occipital position and delivery outcome

Public title

effectiveness of maternal lunge position on rotation of posterior fetal occipital position and delivery outcome

Purpose

Supportive

Inclusion/Exclusion criteria**Inclusion criteria:**

Gestational age is to be 37 weeks or more. Fetal head's position is to be posterior occipital with the approval of ultrasound. Pregnancy is to be singleton. Maternal age's range is to be 18-40. BMI is to be 18-30. Mother is to be at the onset of the labor pains and at the beginning of the active phase of labor (Dilatation equal to and greater than 4 cm).

Exclusion criteria:

High risk pregnancy (Fetal weight over 4000 g, preeclampsia, gestational diabetes, BMI above 30 in mother, history of heart disease in mother, history of respiratory disease in mother) Prolonged pregnancy History of previous cesarean delivery Twin pregnancies and above Existence of severe vaginal bleeding Cases in which the active movement of the mother is prohibited in labor

Age

From **18 years** old to **40 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **216**

Randomization (investigator's opinion)

Randomized

Randomization description

32 blocks will be used. In each block of 6, 3 people will be assigned to the intervention group and 3 people to the control group, which will be arranged randomly. Thus, at the end of each block, there will be two balancing groups.

Blinding (investigator's opinion)

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features

The lounge position refers to a position in which one of the legs is bent while standing and the floor is placed on a chair or a high level and the sole of the other foot is on the ground. Also, this position is such that the sole of one foot is on the ground and the knee of the other foot is on the ground in a position similar to squatting.

Secondary Ids

empty

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

Ahvaz Jundishapur University of Medical Sciences

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Golestan, Farvardin street

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Postal code

61357-33118

Approval date

2022-03-16, 1400/12/25

Ethics committee reference number

IR.AJUMS.REC.1400.693

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

Normal Delivery Managment

ICD-10 code

0.80

ICD-10 code description

زایمان طبیعی

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

Duration of active phase and second stage of labor

Timepoint

Cervix dilatation from 4 centimeter to 10 centimeter for active phase of labor and cervix dilatation from 10 centimeter to delivery of newborn for second stage of labor

Method of measurement

Clinical examination/ Measurement by digital chronometer / record in check list

2**Description**

Labor Pain intensity

Timepoint

Measurement severity of pain for dilatation of 4; 6; 8 and 10 centimeter and second stage

Method of measurement

By visual analog scale

3

Description

Type of delivery

Timepoint

After delivery

Method of measurement

Observation and record in check list

4

Description

Apgar score

Timepoint

At 1 and 5 minutes after birth

Method of measurement

Observation and examination

5

Description

Frequency use of oxytocin during normal labor

Timepoint

During first and second stage of normal labor

Method of measurement

Observation / record in check list

6

Description

Mother satisfaction from delivery

Timepoint

after delivery

Method of measurement

Mackey Childbirth Satisfaction Rating Scale

7

Description

Frequency use of episiotomy

Timepoint

After delivery

Method of measurement

Observation and record in check list

8

Description

Frequency of third and fourth-degree perineal lacerations

Timepoint

After delivery

Method of measurement

Observation and record in check list

9

Description

Fetal head position at birth

Timepoint

At delivery

Method of measurement

Observation and record in check list

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: lunge position

Category

Other

2

Description

Control group: current position

Category

Other

Recruitment centers

1

Recruitment center**Name of recruitment center**

Sina hospital karoon

Full name of responsible person

Maryam hamidi

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Sponsors / Funding sources

1

Sponsor**Name of organization / entity**

Ahvaz University of Medical Sciences

Full name of responsible person

Mehrnoosh zakerkish

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Grant name

RHPRC-0030

Grant code / Reference number

RHPRC-0030

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

Yes

Title of funding source

Ahvaz 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

Ahvaz University of Medical Sciences

Full name of responsible person

Maryam hamidi

Position

MS midwifery student

Latest degree

Master

Other areas of specialty/work

Midwifery

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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

There are currently no plans to publish it.

Study Protocol

Undecided - It is not yet known if there will be 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

Undecided - It is not yet known if there will be 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