Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

The efficacy of maternal positionin labor to correct occipito-posterior fetal position and delivery outcome

Protocol summary

Summary

We designed a randomised clinical trial to evaluate the efficacy of maternal position in labor to correct occipito-posterior fetal position and delivery outcome. A total of 180 women entered the study based on inclusion and exclusion criteria. Occipitoposterior position of fetal head in all of the samples was confirmed using ultrasound. Participants were randomly assigned into one of three groups: Forty five women were selected to the intervention group one: they spent 15-30 minutes per hour of labor in a semi prone position. Forty five women were selected to the intervention group two: they spent 15-30 minutes per hour of labor in a knee-chest position. Ninety women were selected to the control group that they spent more of their labor in current position (recumbent or supine). The most important outcomes of the study including the determination of occipitoanterior position; fetal head position at delivery; duration of active phase and second stage of labor; type of delivery; perineal trauma; the severity of labor Pain; frequency use of oxytocin during labor; frequency use of routine episiotomy; mother's satisfaction from her position and newborn apgar score.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017082111360N3**
Registration date: **2017-11-13, 1396/08/22**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-11-13, 1396/08/22

Registrant information

Name

Mina Iravani

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 916 322 2899

Email address

iravani-m@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Ahvaz Jundishapur University of Medical Sciences

Expected recruitment start date

2017-05-02, 1396/02/12

Expected recruitment end date

2017-08-21, 1396/05/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The efficacy of maternal positionin labor to correct occipito-posterior fetal position and delivery outcome

Public title

The efficacy of maternal positionin labor to correct occipito-posterior fetal position and delivery outcome

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: women were active labor; age bteween18-40 years; BMI between 18 and 30 Kg/m2; assessment of occiput fetal position at the labour onset and confirmed by ultrasound; singleton pregnancy; cephalic fetal presentation and gestational age more

than 37 week. Exclusion criteria: labour induction; complications of pregnancy; any contraindication for use of knee-chest and semi prone position.

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: **180**

Randomization (investigator's opinion)

Randomized

Randomization description

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

Ahvaz Jundishapur University of Medical Sciences

Street address

Golestan, Farvardin street, Khuuzestan,Ahvaz 61357-33118

City

Ahvaz

Postal code

15794-61357

Approval date

2017-04-29, 1396/02/09

Ethics committee reference number

IR.AJUMS.REC.1396.85

Health conditions studied

1

Description of health condition studied

Normal Delivery Manangment

ICD-10 code

0.80

ICD-10 code description

Normal Delivery

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 dillatation of 4; 6; 8 and 10 centimeter and secod stage

Method of measurement

By visual analog scale and mc gill questionnaire/ record in check list

3

Description

Type of delivery

Timepoint

After of 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

Macky satisfaction questionnaire

7

Description
Frequency use of episiotomy
Timepoint
After of delivery
Method of measurement
Observation and record in check list

8

Description
Frequency of third and fourth-degree perineal lacerations
Timepoint
After of 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 1: Semi prone position
Category
Other

2

Description
control group: current position (supine position)
Category
Other

3

Description
Intervention group 2: Knee-chest position
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Mother hospital ramhormoz
Full name of responsible person
Kobra bahmaei
Street address
Mother hospital ramhormoz khouzestan Iran
City
ramhormoz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice-chancellor for Research, Jundishapur University of Medical Sciences
Full name of responsible person
Dr Behzad Sharif MakhmalZade
Street address
School of Nursing and Midwifery, Jundishapur University of Medical Sciences, Ahvaz University City, Khouzestan Ahvaz
City
Ahvaz
Grant name
RHPRC-9601
Grant code / Reference number
RHPRC-9601
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice-chancellor for Research, Jundishapur University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Ahvaz Jundishapuur University of Medical Sciences
Full name of responsible person
Kobra bahmaei
Position
ms midwifery student
Other areas of specialty/work
Street address
Ahvaz Jundishapur University of Medical Sciences
City
Ahvaz
Postal code
15794-61357
Phone
+98 61 3336 2414
Fax

+98 61 3336 1544

Email

itc@ajums.ac.ir

Web page address

http://vchresearch.ajums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Dr. Mina Iravani

Position

Ph.D of Midwifery

Other areas of specialty/work

Street address

School of Nursing and Midwifery, Jondishapour University of Medical Sciences, Ahvaz University City, Khouzestan Ahvaz

City

Ahvaz

Postal code

15794-61357

Phone

+98 61 3373 8538

Fax

+98 61 3373 8333

Email

iravani-m@ajums.ac.i; rminairavani2004@yahoo.com

Web page address

http://ajums.ac.ir/

Person responsible for updating data

Contact

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Dr.Mina Iravani

Position

Ph.D of Midwifery

Other areas of specialty/work

Street address

School of Nursing and Midwifery, Jundishapur University of Medical Sciences, Ahvaz University City, Khouzestan Ahvaz

City

Ahvaz

Postal code

15794-61357

Phone

+98 61 3373 8395

Fax

+98 61 3373 8333

Email

iravani-m@ajums.ac.ir; minairavani2004@yahoo.com

Web page address

http://ajums.ac.ir/

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty