

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

01 Jun 2026

### The effect of acupressure on jyanjyng points and entonox on labour pain and delivery time in nulliparous women

#### Protocol summary

##### Summary

General Purpose: To evaluate the effects of jianjing with entonox on labour pain and delivery time in nulliparous women. Inclusion criteria included: nulliparous women aged eighteen to Thirty-five years old; educated; singleton pregnant women with gestational age Thirty-seven to forty-one weeks, cephalic presentation; Iranian; tend to use analgesia (Entonox Gas or acupressure); women in active phase of labor; not suffering from anatomic and mental disorders and high-risk pregnancies. Exclusion criteria: any factor that would lead to cesarean; lack of desire to continue to decrease. A total of 174 women in labour were randomly divided into the Acupressure group, Entonox group and the control group. After obtaining a referral from the Department of Shahid Beheshti University of Medical Sciences and present it to the Alborz University of Medical Sciences, visiting the maternity ward of Hazrat Ali Hospital and selecting qualified individuals that will agree will be done. In acupressure group, pressure on jianjing acupoint on dilatation of 4-5 cm, 6-7 cm and 8-10 cm will be performed and continue for about twenty minutes. The Entonox group will use the gas in the active phase of labour and how to use will be told. The control group will not have any interference. Labor pain will be measured three times using a subjective labour pain scale (visual-analogue scale). Length of delivery time will be calculated in two stages: from 4 cm cervical dilatation to full cervical dilatation, and full cervical dilatation to the delivery.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT201312106807N11**

Registration date: **2014-06-12, 1393/03/22**

Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2014-06-12, 1393/03/22

##### Registrant information

###### Name

Sedigheh Amir Ali Akbari

###### Name of organization / entity

Shahid Beheshti University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 2272 9240

###### Email address

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##### Recruitment status

**Recruitment complete**

##### Funding source

Shahid Beheshti University of Medical Sciences

##### Expected recruitment start date

2013-10-29, 1392/08/07

##### Expected recruitment end date

2014-03-27, 1393/01/07

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of acupressure on jyanjyng points and entonox on labour pain and delivery time in nulliparous women

##### Public title

Effects of jianjing with entonox on labour pain and duration of labour

##### Purpose

Supportive

## Inclusion/Exclusion criteria

Inclusion criteria: nulliparous women aged 18 to 35 years; be literate; singleton pregnant with gestational age 37 to 41 week; cephalic presentation; Iranian; tend to use analgesia (entonox gas or acupuncture); women in the active phase of labor (3-4 centimeters cervical dilatation) or before; not suffering from poor mental health and anatomic (psychosis, schizophrenia, abnormalities of the uterus and pelvic); not having any head injury with some degree of lack of alertness, pneumothorax, and if such injury, atherosclerosis, poisoning and damage to the facial nerve; No risk to patients paced for chronic disease such as heart disease, pulmonary hypertension and diabetes; absence of high risk pregnancy such as gestational hypertension, decreased fetal movement, intrauterine growth restriction, fetal death, oligohydramnios and polyhydramnios and rupture of membrane more than 12 hours; a history of infertility; no risk of skin ailments such as eczema and infection of the skin surface. Exclusion criteria: any factor that would lead to a cesarean section; lack of desire to continue.

## Age

No age limit

## Gender

Female

## Phase

N/A

## Groups that have been masked

No information

## Sample size

Target sample size: **174**

## 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

Shahid beheshti University of Medical Sciences

##### Street address

Velenjak street, Shahid Chamran freeway, Tehran, Iran

##### City

Tehran

##### Postal code

##### Approval date

2013-10-28, 1392/08/06

## Ethics committee reference number

400/501

## Health conditions studied

### 1

#### Description of health condition studied

Pain intensity and duration of delivery

#### ICD-10 code

080-084

#### ICD-10 code description

Delivery

## Primary outcomes

### 1

#### Description

Pain intensity of delivery

#### Timepoint

Pain intensity in 4-5, 6-7 and 8-10 dilatation before and after intervention

#### Method of measurement

visual-analogue scale

### 2

#### Description

Duration of delivery

#### Timepoint

First stage and second stage of labor

#### Method of measurement

Time

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

In the acupuncture group, women receive the acupuncture on the point jianjing. The 20-minute periodic acupuncture on GB21 acupoint will be performed at dilatation of 4-5, 6-7 and 8-10. (pressure on uterine contraction). Pressure will be applied deeply until the color of nail changes slightly. Labor pain will be measured three times using a subjective labor pain scale (visual-analogue scale) immediately after the intervention. Length of delivery time will be calculated in first and second stage of labour.

#### Category

Prevention

### 2

#### Description

In the entonox group, women receive the entonox at the

beginning of the active phase of labor (cervical dilatation 4 cm) after learning how to use it. Labor pain will be measured three times using a subjective labor pain scale. Length of delivery time will be calculated in first and second stage of labor. Labor pain will be measured three times using a subjective labor pain scale (visual-analogue scale) immediately after the intervention. Length of delivery time will be calculated in first and second stage of labor.

**Category**

Prevention

**3**

**Description**

In the control group, no intervention will be done. Labor pain will be measured three times using a subjective labor pain scale. Length of delivery time will be calculated in first and second stage of labor.

**Category**

Prevention

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Hazrate ali Hospital

**Full name of responsible person**

**Street address**

**City**

Karaj

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Dr.Masoume Simbar

**Street address**

Nursing and midwifery faculty, Niayesh Intersection, Tehran

**City**

Tehran

**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**

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**

Shahid Beheshti University of Medical Sciences

**Full name of responsible person**

Sedigheh Amir Ali Akbari

**Position**

Ph.D of Midwifery

**Other areas of specialty/work**

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**Person responsible for updating data**

**Contact**

**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*