

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### The Effect of Acupressure on Points (LV3) on Non Stress Test Results, Mother Heart Rate and Blood Pressure in Pregnant Mothers

#### Protocol summary

##### Study aim

The effect of acupressure, point (LV3) on results of non-stress test, pulse and blood pressure of pregnant mothers

##### Design

Blind randomized, controlled trial, non-probabilistic, targeted sampling

##### Settings and conduct

To select research units, a non-probabilistic sampling method based on purpose and volunteer sampling method will be exploited. Accordingly, from among the patients who referred the emergency clinic of Bentolhoda hospital in Bojnurd, eligible individuals with informed consent and sufficient time and meet entry requirements elected. Blind: The NST strip is interpreted by a skilled and ignorant person to the objectives of the study.

##### Participants/Inclusion and exclusion criteria

Among those who had referred to the emergency clinic of Bentolhoda Hospital in Bojnurd, eligible people are selected for their informed consent, sufficient time and criteria for entering the study.

##### Intervention groups

Five minutes before the test, mother's pulse and blood pressure were measured for the non stress test. It takes about 20 minutes. After 5 minutes, in the intervention group, the researcher will arrive at a pressure of 3 kg for 1 minute and rest for 30 seconds, and it takes 2.5 minutes for each leg. While the above point is under pressure and 5 minutes later, the heartbeat of fetus is monitored. In the control group, the researcher will only touch a point near the point LV3 (with a radius of 2 cm) that is not on the meridian path. After five minute the pulse and blood pressure of mothers are measured and the NST strip is interpreted by a specialist in the hospital and also by an expert that is unaware to the study objectives.

##### Main outcome variables

The effect of acupressure, point (LV3) on non stress test results, pulse and blood pressure of pregnant mothers

#### General information

##### Reason for update

##### Acronym

طب فشاری

##### IRCT registration information

IRCT registration number: **IRCT20171209037795N1**

Registration date: **2018-07-22, 1397/04/31**

Registration timing: **registered\_while\_recruiting**

Last update: **2018-07-22, 1397/04/31**

Update count: **0**

##### Registration date

2018-07-22, 1397/04/31

##### Registrant information

##### Name

Maryam Bagheri

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 58 3242 7442

##### Email address

bagherim@nkums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2018-03-08, 1396/12/17

##### Expected recruitment end date

2018-09-08, 1397/06/17

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

## Scientific title

The Effect of Acupressure on Points (LV3) on Non Stress Test Results, Mother Heart Rate and Blood Pressure in Pregnant Mothers

## Public title

The effect of acupressure on the Non Stress Test results

## Purpose

Diagnostic

## Inclusion/Exclusion criteria

### Inclusion criteria:

To participate in the research, you must be informed in writing. Age 18 to 35 years old. Have at least basic elementary education Pregnancy was first and single. The gestational age was 40 to 42 weeks. There is no medical problem. There is no maternity problem. Do not consume drugs or alcohol. No students or health care personnel. During pregnancy, do not have severe mental or physical problems.

### Exclusion criteria:

If she had a contraction. The basic heart rate of the fetus is less than 110 beats per minute. The basic heart rate of the fetus is greater than 160 beats per minute Maternal blood pressure is greater than or equal to 140 to 90 mmHg. Mother's pulse is more than 100 beats per minute.

## Age

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

## Gender

Female

## Phase

N/A

## Groups that have been masked

- Outcome assessor

## Sample size

Target sample size: **84**

## Randomization (investigator's opinion)

Randomized

## Randomization description

First, a non-objective sampling method of purposeful sampling will be conducted among women who are willing to participate and criteria for entering the research. Then, according to the random number table, randomization will be done for each random sample, based on the set point on the random numbers table and determining the direction to the right if the number was read from the paired table to the control group and if the person it was entered into the intervention group.

## Blinding (investigator's opinion)

Single blinded

## Blinding description

After intervention in the intervention group and in the control group, after the test, NST (Non stress test) is interpreted by a specialist in the hospital and then by a skilled and unaware person for study purposes.

## Placebo

Used

## Assignment

Parallel

## Other design features

The study has an intervention group that the researcher

is doing non stress test on the mother a with pressure on LV3 point , and is performed routinely in the control group.

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics Committee of North Khorasan University of Medical Sciences

##### Street address

Bojnurd Bentolhoda haspital

##### City

Bojnurd

##### Province

North Khorasan

##### Postal code

9415614963

#### Approval date

2017-12-27, 1396/10/06

#### Ethics committee reference number

ir.nkums.rec.1396.48

## Health conditions studied

### 1

#### Description of health condition studied

Acupressure, LV3 point, fetus non stress test

#### ICD-10 code

P00-P96

#### ICD-10 code description

Certain conditions originating in the perinatal period

## Primary outcomes

### 1

#### Description

Fetal non stress test result,

#### Timepoint

Pulse measurement and maternal blood pressure 5 minutes before the test and 5 minutes after intervention

#### Method of measurement

Pulse count, mercury pressure gauge machine

## Secondary outcomes

### 1

#### Description

Mother's pulse and blood pressure

#### Timepoint

5 minutes before and after intervention

#### Method of measurement

Pulse count and mercurial blood pressure device

## Intervention groups

### 1

#### Description

Intervention group: Mothers of the study will be asked to lie flat on the left side and after hearing of the heartbeat of the fetus and to ensure the absence of uterine contraction, stress-free test is performed for 20 minutes, after 5 minutes, in the intervention group, a researcher An equivalent of 3 kg will be given for 1 minute and rest for 30 seconds, and will be performed for a total of 2.5 minutes for each leg.

#### Category

Diagnosis

### 2

#### Description

Control group: The researcher will only touch the point near the point LV3 (2 cm radius) that is not on Meridian's path.

#### Category

Diagnosis

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Bojnurd Bentolhoda Hospital

##### Full name of responsible person

Maryam Bagheri

##### Street address

Bentolhoda Hospital, Honar street,Bojnurd

##### City

بجنورد

##### Province

North Khorasan

##### Postal code

9415614963

##### Phone

+98 58 3241 4474

##### Email

bagherim@nkums.ac.ir

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Bojnourd University of Medical Sciences

##### Full name of responsible person

Maryam Bagheri

##### Street address

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##### City

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#### Province

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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

Bojnourd 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

Bojnourd University of Medical Sciences

##### Full name of responsible person

Maryam Bagheri

##### Position

tutor

##### Latest degree

Master

##### Other areas of specialty/work

Midwifery

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## Person responsible for scientific inquiries

#### Contact

##### Name of organization / entity

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##### Full name of responsible person

Maryam Bagheri

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## Person responsible for updating data

### Contact

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**Email**  
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## Sharing plan

### Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

### Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

### Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

### Informed Consent Form

Undecided - It is not yet known if there will be 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

Undecided - It is not yet known if there will be a plan to make this available

### Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

### Title and more details about the data/document

Total data

### When the data will become available and for how long

A year after printing results

### To whom data/document is available

Researchers working in academic institutions

### Under which criteria data/document could be used

Applying unidentifiable individual data

### From where data/document is obtainable

Email

### What processes are involved for a request to access data/document

Email request, plan explanation, answer

### Comments