

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

12 Jul 2026

### Comparison of the effect of acupressure point LI4 and point GB34 on the severity of pain in patients undergoing orthopedic leg surgery

#### Protocol summary

##### Study aim

Comparison of the effect of acupressure on LI4 and GB34 points on the severity of pain in patients undergoing surgery in the legs

##### Design

The study groups included two groups of acupressure intervention, one sham group and one control group, which was the priority of intervention by drawing and available.

##### Settings and conduct

Hospitals affiliated to Iran University of Medical Sciences, Hazrat Rasool Hospital and Shafa Yahyaiean Hospital, formed the environment for this study.

##### Participants/Inclusion and exclusion criteria

Leg surgery Lack of housing Availability of access to the intervention point

##### Intervention groups

The intervention groups included the acupressure groups LI4 and GB34 and the sham and control group

##### Main outcome variables

there has not been found any article comparing the acupressure component and the effect of acupressure on the pain of the leg surgery, and given that orthopedic surgeries are very common and postoperative surgery, The practice is also intense, and on the other hand, drug actions to relieve pain are also associated with complications. Therefore, the researcher decided to perform acupressure intervention for these patients, in order to be positive with the expansion of the use of complementary medicine such as Acupressure in nursing care is a positive step in relieving pain and recovery in patients undergoing surgery.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20180602039938N1**

Registration date: **2021-04-22, 1400/02/02**

Registration timing: **retrospective**

Last update: **2021-04-22, 1400/02/02**

Update count: **0**

##### Registration date

2021-04-22, 1400/02/02

##### Registrant information

###### Name

behnam mozafari

###### Name of organization / entity

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 4448 6753

###### Email address

mozafari.b@tak.iums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2017-09-23, 1396/07/01

##### Expected recruitment end date

2017-12-22, 1396/10/01

##### Actual recruitment start date

2017-09-23, 1396/07/01

##### Actual recruitment end date

2017-12-22, 1396/10/01

##### Trial completion date

2018-03-13, 1396/12/22

##### Scientific title

Comparison of the effect of acupressure point LI4 and point GB34 on the severity of pain in patients undergoing orthopedic leg surgery

##### Public title

The effect of acupressure on the severity of pain in the

leg surgery

**Purpose**  
Health service research

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Age over 18 years orthopedic leg surgery non receiving a painkiller for at least 4 hours before the first pain assessment Sample selection or consideration in research on the second day after surgery on shinbone absence of sensory-perceptual ,visual ,hearing and communication impairment The availability of the stimulation area and the absence of ulcers No addiction to stimulant substances Not having previous experience of acupressure for any reason Insensitivity to touching Pain expression by the patient No malignancies absence of chronic bone and joint diseases, such as osteoporosis and arthritis  
**Exclusion criteria:**  
Failure to attend the intervention session Death of the patient Received painkillers up to 4 hours before the intervention by patient

**Age**  
From **18 years** old

**Gender**  
Both

**Phase**  
N/A

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **220**  
Actual sample size reached: **220**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
The research samples selected from the first type of intervention based on the lottery were selected according to available criteria.

**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

Ethics Committee of Iran University of Medical Sciences

##### Street address

Vali-e-asr St, Rashid Yasemi St

##### City

Tehran  
**Province**  
Tehran  
**Postal code**  
۱۴۴۹۶۱۴۵۳۵

#### Approval date

2017-02-27, 1395/12/09

#### Ethics committee reference number

IR.IUMS.REC.9311686023

## Health conditions studied

### 1

#### Description of health condition studied

Deformity- fracture- osteoporosis- mass

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

Pain in patients after orthopedic leg surgery

#### Timepoint

Before and five minutes after the intervention

#### Method of measurement

Visual Analogue Scale

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: The general acupressure point (LI4) (the splint of the second palms of the palm and throat, in other words, between the thumb and the index finger) is pressed. This technique was performed using an intermediate thumb for one minute in non-meeting and non-smoking rooms of the room for one minute. Second intervention group: the special point (GB34) (located in the front trunk of the thin thimble of the straw) vertically for one minute The pressure starts to start very long and the pressure increases to some extent, or the patient feels pleasantly releasing a stream or lightness, or the nail is changed by the effect of the therapist. The third intervention group: the spot (on the highest point of the ankles Exterior foot), which is not a compression point for reducing the pain of the shin, but is an acupressure point, and as a point in this study. Pseudotropic pressure was considered, selected and stimulated. Control group: No intervention was performed and only two questionnaires were completed before and after 5 minutes.

#### Category

Treatment - Other

## Recruitment centers

1

### Recruitment center

**Name of recruitment center**

Hazrat Rasool and Shafaa Yahiaieian

**Full name of responsible person**

Behnam Mozafary

**Street address**

Vali-e-asr St, Rashid Yasemi St

**City**

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b.mozafary@yahoo.com

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Iran University of Medical Sciences

**Full name of responsible person**

Behnam Mozafary

**Street address**

Vali-e-asr St, Rashid Yasemi St

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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**

Iran 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**

Iran University of Medical Sciences

**Full name of responsible person**

Behnam Mozafary

**Position**

student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Nursery

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## Person responsible for scientific inquiries

### Contact

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## Person responsible for updating data

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**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Yes - There is a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Yes - There is a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available

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

In this research, the method used to reduce the pain of the leg surgery has been considered.

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

2018

**To whom data/document is available**

Researchers working in academic and hospital institutes

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

All scholars after obtaining a permission

**From where data/document is obtainable**

b.mozafary@yahoo.com

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

By email

**Comments**