Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 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
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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 Yahiaeian
Full name of responsible person
Behnam Mozafary
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Sponsors / Funding sources

1

Sponsor

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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 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 permision
From where data/document is obtainable
b.mozafary@yahoo.com
What processes are involved for a request to access data/document
By email
Comments