Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Comparison effect of Hegu and Ciliao acupressure on labor pain and delivery outcome in the first stage of labor in primiparous womencontrolled trial

Protocol summary

Summary

Aim: We aimed to determine and compare the effect of Hegu and Ciliao acupressure on labor pain and delivery outcome. Methods: In this randomized controlled trial, 105 primiparous women in active phase of first-stage labor were equally assigned to three groups receiving acupressure on either Hegu or Ciliao point during uterus contractions and control group with no intervention. Pain was assessed by numerical rating scale (0 to 10) in three cervical dilatation stages (4-5, 6-7, and 8-10 cm), before and after intervention. Mode of delivery and neonatal Apgar score were considered as delivery outcomes. Results: The three groups were similar in baseline characteristics. Pain relief was significant in both acupressure groups in three cervical dilatation stages. In control group, however, pain relief was significant in the first and second but not third stage. Pain relief was significantly greater in Hegu and Ciliao groups compared with controls in all stages. Also, acupressure of Ciliao point was superior to Hegu point in pain relief in the first and second but not third stage. No significant difference was observed in terms of delivery outcomes. Conclusion: Acupressure of Ciliao and Hegu points are effective in controlling labor pain with a slight superiority for Ciliao point. Acupressure of these points, however, does not affect delivery or neonatal outcomes.

General information

Acronym

Hegu and Ciliao acupressure on labor pain

IRCT registration information

IRCT registration number: **IRCT201601283860N23**
Registration date: **2016-02-05, 1394/11/16**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-02-05, 1394/11/16

Registrant information

Name

Gity Ozgoli

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Shahid Beheshti University of Medical Sciences

Expected recruitment start date

2008-07-22, 1387/05/01

Expected recruitment end date

2008-11-21, 1387/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison effect of Hegu and Ciliao acupressure on labor pain and delivery outcome in the first stage of labor in primiparous womencontrolled trial

Public title

Effect of Hegu and Ciliao acupressure on labor pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: age range of 19-35 years; term pregnancy (>37 weeks of gestation); planned vaginal delivery without obstetrical or non-obstetrical complications; fetal vertex presentation; being in active phase of first-stage labor with cervical dilatation of ≥4 cm; presence of at least three uterine contractures within 10 minutes. Exclusion criterion: unwillingness to continue taking part in the study.

Age

From **19 years** old to **35 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **105**

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

Neat to Ayatollah Taleghani-Arab Street--Yemen Street- Chamran Highway

City

Tehran

Postal code

Approval date

2010-09-23, 1389/07/01

Ethics committee reference number

25/12/57/پ

Health conditions studied

1

Description of health condition studied

Labor pain

ICD-10 code

XV

ICD-10 code description

Pregnancy, childbirth and the puerperium

Primary outcomes

1

Description

Labor pain

Timepoint

in three cervical dilatation stages (4-5, 6-7, and 8-10 cm), before and after intervention

Method of measurement

numerical rating scale

Secondary outcomes

1

Description

Mode of delivery

Timepoint

once-after delivery

Method of measurement

Questioner

2

Description

Neonatal Apgar Score

Timepoint

1 and 5 minute after birth

Method of measurement

check list

Intervention groups

1

Description

Intervention group 1- Hegu acupressure: The subjects of Hegu group were asked to sit in their favorable position and the researcher sat in front of them. As the women notified to have pain, the researcher applied pressure to the Hegu point of the right hand by her right thumb. To prevent any discomfort, the pressure was applied deeply and up and down around the Hegu point until nail bed color of the researcher changed. Applying pressure was stopped by the end of each contraction and was started again by the beginning of another contraction. The interventions were applied at the cervical dilatations of 4-5 cm, 6-7 cm and 8-10 cm during six uterus contractions.

Category

Other

2

Description

Intervention group 2-Ciliao acupressure:The women of the Ciliao group were asked to sit in their favorable

position and the researcher sat behind them in a way to have access to sacral region. As the women notified to have pain, the researcher applied pressure deeply and in a rotational manner to bilateral Ciliao points simultaneously until the color of the examiner nail bed changed. Applying pressure was stopped by the end of each contraction and was started again by the beginning of another contraction. The interventions were applied at the cervical dilatations of 4-5 cm, 6-7 cm and 8-10 cm during six uterus contractions.

Category
Other

3

Description
Control group: Tthe researcher attended the bedside of the subjects and performed all the routine activities done for the other two groups except applying acupressure. The researcher communicated with parturient women verbally like other two groups

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Shahid Akbarabadi Hospital

Full name of responsible person
Giti Ozgoli

Street address
Nursing and Midwifery School, Niayesh Highway, Vali-asr Street

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Shahid Beheshti University of Medical Sciences

Full name of responsible person
Giti Ozgoli

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Department of Midwifery and Reproductive Health, Nursing and Midwifery School, Shahid Beheshti University of Medical Sciences, Niayesh Highway, Vali-asr Street

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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
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Position
PhD/Assistant Professor of Midwifery

Other areas of specialty/work

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Web page address

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