

Clinical Trial Protocol

Iranian Registry of Clinical Trials

25 Jun 2026

The effect of foot reflexology on pain and physiological parameters after cesarean section in patients referring to Alzahra educational center in Rasht

Protocol summary

Summary

Introduction: Pain is a common phenomenon after all surgical operation. Acute and unrelieved pain can cause physical and mental complications, delayed recovery and prolonged hospitalization. Although using analgesia is usual to relieve pain, its complication, unavailability, necessity of taking low drug, especially analgesia, and also ineffectiveness of using analgesia alone, to relieve pain has focused today's nursing system on complementary treatments and Nonpharmacological Interventions. One of these methods is foot reflexology, so this study was to investigate the effect of foot reflexology on pain and physiological parameters after cesarean section in patients undergone cesarean section. Methods and materials: This clinical trial study was carried out on 62 women who referring to cesarean section in Alzahra Hospital (Rasht city) . They were randomly divided into two groups of case and control. The reflexology group received a 30-minute foot massage in two sessions, with 24-hours interval. Data gathering tool included a demographic form, step-visual analogue scale, pain score and physiological parameters form, and indicator and chronometer. Data were analyzed with descriptive and analytic statistic tests in 15th version of SPSS. Results: There was no demographical difference between two groups and they were matched completely. In case group, severity of pain after first stage of foot reflexology was lower than control group. The severity of pain after second stage was significantly reduced in case group in compare with control group. After first stage of foot reflexology in case group, systolic blood pressure decreased and after second stage if increased, but average of pain intensity showed no significant difference assumed with control group. The mean of pulse rate, after both first and second stage, decreased significantly, but there was no significant difference between groups. Diastolic blood

pressure and respiratory rate did not vary between case and control groups. Conclusion: Pain severity was lower in case group after both first and second stage. In case group, systolic blood pressure decreased after first stage and increased after second stage significantly. In general, foot reflexology appears to be a useful method for reducing pain in patients. So according to effectiveness of food reflexology in pain reduction and some physiologic parameters and by considering its advantages, we can conclude that the results introduce a pain relief method for surgical nurses. Keywords: Cesarean section , Foot, Massage, Pain, postoperative , Palliative Care

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138812021174N4**

Registration date: **2011-04-10, 1390/01/21**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-04-10, 1390/01/21

Registrant information

Name

Atefeh Ghanbari

Name of organization / entity

Guilan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 13780509

Email address

at_ghanbari@gums.ac.ir

Recruitment status

Recruitment complete

Funding source

vice chancellor for research , Gilan University of Medical Sciences

Expected recruitment start date

2010-09-02, 1389/06/11

Expected recruitment end date

2010-11-15, 1389/08/24

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of foot reflexology on pain and physiological parameters after cesarean section in patients referring to Alzahra educational center in Rasht

Public title

The effect of foot reflexology on pain and physiological parameters after cesarean section in patients referring to Alzahra educational center in Rasht

Purpose

Supportive

Inclusion/Exclusion criteria

inclusion criteria: 1- spinal anesthesia 2-not having hysterectomy and tubectomy 3-having fanashtanal surgery cutting 4- having healthy foot 5- not having reflexology history 6- not addict (sedative , alcohol and...) 7-not having problem in visual and verbal 8- orientation to time and place 9- not having chronic pain
exclusion criteria : 1- severe complication such as: sever bleeding,edema,acute infection,not contraction after operative, not having bs 2- need to ICU AND CCU 3- not willing to participate in research

Age

From **20 years** old to **40 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **31**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

1

Registry name

no

Secondary trial Id

no

Registration date

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee og Gilan University of Medical Sciences

Street address

Rasht, Namjoo street , Gilan University of Medical sciences

City

Rasht

Postal code

Approval date

2010-08-20, 1389/05/29

Ethics committee reference number

4091,88/6/4

Health conditions studied

1

Description of health condition studied

pain.physiological criteria,cesarean

ICD-10 code

xv 000-099

ICD-10 code description

082/0

Primary outcomes

1

Description

pain,physiological criteria

Timepoint

pre and post (reflexology)

Method of measurement

vas instrument, sphangomanometer, hand

Secondary outcomes

1

Description

pain,physiological criteria

Timepoint

24 hours after primary reflexology

Method of measurement

vas instrument, sphangomonometr,hand

Intervention groups

1

Description

at first , if VAS was 3 and higer , patient entered in research process, then patient divided two group (control and case),in the case group , reflexology implemented and then pain and physiological criteria measured and after 24 hours , again pain and physiological criteria (pre and posttest)measured .in the control group , not having reflexology , and all parameters measured in same time such as casegroup .

Category

Prevention

Recruitment centers

1

Recruitment center

Name of recruitment center

Alzahra Hospital

Full name of responsible person

Atefeh Ghanbari

Street address

Rasht,Namjoo Street, AlzahraHospital

City

Rasht

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research

Full name of responsible person

Atefeh Ghanbari

Street address

Rasht , Namjoo Street, Resarch Affairs

City

Rasht

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Vice chancellor for research

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

Gilan University of Medical Sciences

Full name of responsible person

Atefeh Ghanbari

Position

Phd

Other areas of specialty/work

Street address

Rasht ,GilanUniversity of Medical Sciences

City

Rasht

Postal code

Iran

Phone

+98 13 1555 5056

Fax

+98 13 1555 0098

Email

at_ghanbari@gums.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Gilan University of Medical Sciences

Full name of responsible person

Atefeh Ghanbari

Position

Phd

Other areas of specialty/work

Street address

Rasht,Gilan University of Medical Sciences

City

Rasht

Postal code

Phone

+98 13 1555 5056

Fax

+98 13 1555 0098

Email

at_ghanbari@gums.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Gilan University of Medical Sciences

Full name of responsible person

Atefeh Ghanbari

Position

Phd

Other areas of specialty/work

Street address

Rasht, Namjoo Street, Gilan University of Medical Sciences

City

Rasht

Postal code

Phone

+98 13 1555 5056

Fax

+98 13 1555 0098

Email

at_ghanbariu@gums.ac.ir

Web page address

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