Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 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 , Guilan 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