Clinical Trial Protocol
Iranian Registry of Clinical Trials

01 Jun 2026

Evaluation of the Effect of Anethum graveolens L. seed Essential oil on Intestinal Function and Post Cesarean Pain.

Protocol summary

Study aim
Determining of the Effect of Anethum graveolens L. seed Essential oil on Intestinal Function and Post Cesarean Pain.

Design
Clinical trial on the one hand blind

Settings and conduct
A clinical trial study of one hand blind(statistical analyzer) was performed on 80 cesarean section women in Imam Reza (AS) and Umm Al-Banin (AS) hospitals. Research units are selected by easy sampling and randomly assigned to two intervention groups and a control group. In the control group, routine care is performed. In addition to routine care, the intervention group is given the seeds of dill seeds. Before starting the intervention and at the end of every 20 minutes and then every 4 hours ± 30 minutes to 12 hours after cesarean section, bowel function is measured by measuring the severity of bloating with visual instruments MC Gill is measured.

Participants/Inclusion and exclusion criteria
Iranian. The age is between 18 - 35 years. Have a minimum of literacy. Not be third and more cesarean section or emergency cesarean section. Sign the written consent form. Be Sensory Cesarean section is a spinal and lower transverse incision of the uterus and "fanneistiel " incision. The mother should be fully conscious. The baby should be single, alive, Healthy and term. Do not have speech-hearing problems or an accent that prevents communication with the researcher. Not addicted to drugs, alcohol or tobacco. During the last 6 months, he has not been subjected to major stress Do not suffer from medical conditions Has not used herbal medicines for the past 24 hours. The mother's oral temperature should not be equal to or greater than 38. C. Not be depressed, anxious, or stressed and known to be sensitive to Anethum graveolens L. seed

Intervention groups
The intervention team receives dill seeds in addition to routine care.

Main outcome variables
Intestinal Function and Post Cesarean Pain.

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20190724044321N1**
Registration date: **2020-06-12, 1399/03/23**
Registration timing: **retrospective**

Last update: **2020-06-12, 1399/03/23**
Update count: **0**

Registration date
2020-06-12, 1399/03/23

Registrant information

Name
Zohreh Yousefi

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 51 4322 1495

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yousefizh961@mums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-11-22, 1398/09/01

Expected recruitment end date
2020-05-21, 1399/03/01

Actual recruitment start date
empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Evaluation of the Effect of Anethum graveolens L. seed Essential oil on Intestinal Function and Post Cesarean Pain.

Public title

Evaluation of the Effect of Anethum graveolens L. seed Essential oil on Intestinal Function and Post Cesarean Pain.

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria:

Be Iranian. The age is between 18 - 35 years. Have a minimum of literacy. Not be third and more cesarean section or emergency cesarean section. Sign the Satisfaction letter form. Be Sensory Cesarean section is a spinal and lower transverse incision of the uterus and "fanneistiel" incision. The mother should be fully conscious. The baby should be single and alive and should not be hospitalized in the neonatal intensive care unit. The gestational age should be 37 weeks or more based on the first day of the last menstrual period or the first trimester of pregnancy. Do not have speech-hearing problems or an accent that prevents communication with the researcher. Not addicted to drugs, alcohol or tobacco. During the last 6 months, he has not been subjected to major stress (serious illness of himself and his wife, death of a loved one, migration, accident and severe family disputes). Do not suffer from medical conditions (diabetes, preeclampsia, liver, heart, respiratory, kidney, coagulation, epilepsy, paralysis, mental disorders diagnosed by a psychiatrist or psychologist, vascular thrombosis, autoimmune diseases including MS). Has not used herbal medicines for the past 24 hours. The mother's oral temperature should not be equal to or greater than 38. C. Not be severe depressed, anxious, or stressed It is not known to be sensitive to Anethum graveolens L. seed

Exclusion criteria:

Mother's refusal to participate in Continues research Complications after cesarean section: high blood pressure, bleeding requiring blood transfusion Maternal fever Observe any possible Complications of Anethum graveolens L. seed Essential oil

Age

From **18 years** old to **35 years** old

Gender

Female

Phase

3

Groups that have been masked

- Care provider
- Data analyser

Sample size

Target sample size: **80**

Randomization (investigator's opinion)

Randomized

Randomization description

Blocked by random allocation method, The mothers were divided into two groups, intervention A and control group B. According to the sample size, 5 blocks of 4 (AABB, BBAA, ABAB, AAAA, BBBB) were placed and were divided into two equal groups of intervention and control.

Blinding (investigator's opinion)

Single blinded

Blinding description

In this trial, only the health care provider and the data analyzer (data review with codes A and B) were blinded. Due to the lack of placebo, it was not possible to blind the researcher and the research unit.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Mashhad University of Medical Sciences

Street address

Qureshi Building, University Street, Mashhad, Iran.

City

Mashhad

Province

Razavi Khorasan

Postal code

9173595199

Approval date

2019-10-22, 1398/07/30

Ethics committee reference number

IR.MUMS.NURSE.REC.1398.058

Health conditions studied

1

Description of health condition studied

K59.9 Functional intestinal disorder , unspecified 082 single delivery by caesarean section

ICD-10 code

K59.9 - 0

ICD-10 code description

K59.9 Functional intestinal disorder , unspecified 082 single delivery by caesarean section

Primary outcomes

1

Description
pain
Timepoint
Before the intervention and then every 20 minutes to 3 times and then every 4 hours ± 30 minutes to 12 hours after cesarean section
Method of measurement
McGill Pain Scale

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: In order to prepare Essential oil , dill seeds were approved by the expert of the Department of Medicinal Plants (Herbalium) of Mashhad University of Medical Sciences after preparing them from reputable commercial sources. The grains were then crushed and the essential oil was prepared by hydro distillation using the Clevenger device and dried on sodium sulfate without water and stored in a closed vial at 4 Celsius. 1 cc of the required oil was obtained from 100 grams of dried dill seeds. The required oil was dissolved in a hydro alcoholic solvent (ethanol / water / 80/20) and then poured into 20 cc bottles. The ratio of oil to solvent is 1: 3.The intervention was performed 4 hours after the operation and after completing the relevant forms; In the intervention group, 40 drops of dill seeds were diluted in 30 cc of tap water and given to the patient. Plumbing water was given to the patient, and after 20 minutes again after measuring with the appropriate instrument, the patient was given the third dose similar to the previous two doses. 20 minutes after the end of the third intervention and then every 4 hours +- 30 minutes to 12 hours after the end of the cesarean section, bowel function and pain were measured and recorded again.
Category
Prevention

2

Description
Control group: In this study, due to the start of the intervention in 4 hours after cesarean section and considering that the patient is NPO up to 12 hours after the operation, the control group is without placebo and only receives routine treatment but in 4 hours after cesarean section. Every 20 minutes to 3 times and then every 4 hours for 30 minutes to 12 hours after the relevant cesarean section to complete the bowel function and pain will be completed.
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Imam Reza and U mm Al-Bani Hospital in Mashhad
Full name of responsible person
Zohreh Yousefi
Street address
53, between Golnar 3 and 5, Golnar Street, Neyshabour, Iran
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Mashhad University of Medical Sciences
Full name of responsible person
Dr. Mohsen Tafaghdi
Street address
Between Shahid Javan Square and Al-Shahidi Alley, Shahid Fakoori Boulevard, Mashhad, Iran
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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
Mashhad 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
Mashhad University of Medical Sciences

Full name of responsible person
Zohreh Yousefi

Position
Master of Midwifery Student

Latest degree
Bachelor

Other areas of specialty/work
Midwifery

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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
Yes - There is a plan to make this available

Title and more details about the data/document
Effect of Anethum graveolensL. seed Essential oil on Intestinal Function and Post Cesarean Pain

When the data will become available and for how long
2020

To whom data/document is available
Midwifery students

Under which criteria data/document could be used
Systematic review

From where data/document is obtainable
Email

What processes are involved for a request to access data/document
Articles published in this field will be sent to the applicant.

Comments