Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

The effects of essential oil aromas of Lemon verbena (Lippia citriodora) on anxiety and physiologic indicators of patients before Cesarean Surgery

Protocol summary

Summary

The aim of study was to evaluate the effects of essential oil aromas of Lemon verbena (Lippia citriodora) on amount of anxiety and physiologic indicators of patients before Cesarean Surgery at Alzahra hospital in the city of Rasht in 1395 in a randomized clinical trial. Inclusion criteria included: Iranian nationality; full consciousness; the ability to read and write and smell; a hemodynamic stability; lack of emergency caesarean section; no history of surgery other than caesarean section and no history of hospitalization or other medical care due to mental disorders. Exclusion criteria: history of allergy to fragrances of lemon. The minimum required sample size in each groups are 42 people. In the aromatherapy group; 3 drops of essential oil of Lemon verbena leaves are used in this manner; a cotton ball will be dipped with three drops of essential oil, then put it into jars with lids. Applicants will be given to each group a jar. The volunteers be asked to open the jar's door and kept it 10-7 cm from their nose and breathe normally for 20 minutes. Anxiety is measured 20 minutes after aromatherapy. In the Control group will be used 3 drops of distilled water and according to the former method will be given to the patient, and then measured the intensity of anxiety after 20 minutes.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016073116325N4**
Registration date: **2016-09-08, 1395/06/18**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2016-09-08, 1395/06/18

Registrant information

Name
Katayoun Haryalchi

Name of organization / entity
Guilan University of Medical Sciences

Country
Iran (Islamic Republic of)

Phone
+98 13 1322 5624

Email address
haryalchi@gums.ac.ir

Recruitment status
Recruitment complete

Funding source
Vice chancellor for research-Guilan University of Medical Sciences

Expected recruitment start date
2016-08-22, 1395/06/01

Expected recruitment end date
2017-06-22, 1396/04/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effects of essential oil aromas of Lemon verbena (Lippia citriodora) on anxiety and physiologic indicators of patients before Cesarean Surgery

Public title
The effects of essential oil aromas of Lemon verbena (Lippia citriodora) on anxiety and blood pressure,respiratory and heart rate of patients before

Cesarean Surgery

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria including: Iranian nationals; complete intelligence; the ability to read and write and smell; a hemodynamic stability; lack of emergency cesarean section; no history of surgery other than caesarean section; non-smoker; no alcohol or drugs; non-use of benzodiazepines for a week before the surgery; no history of allergic rhinitis (pharmaceutical, seasonal or oral) or respiratory problems and no history of hospitalization or other medical care due to mental disorders. Exclusion criteria: history of allergy to fragrances of lemon

Age

From **14 years** old to **55 years** old

Gender

Female

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **84**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Giulan university of medical sciences Ethics committee

Street address

Vice chancellor for research and technology- above the iran radiator representation- opposite sepah bank- western martyr Beheshti boulevard- gas square-Rasht-Guilan

City

Rasht

Postal code

41938-93345

Approval date

2016-06-21, 1395/04/01

Ethics committee reference number

IR.GUMS.REC.1395.104

Health conditions studied

1

Description of health condition studied

Maternal distress during labour and delivery

ICD-10 code

O75.0

ICD-10 code description

Other complications of labour and delivery, not elsewhere classified

Primary outcomes

1

Description

The effects of essential oil aromas of Lemon verbena (Lippia citriodora) on anxiety and physiologic indicators of patients before Cesarean Surgery.

Timepoint

20 minute after intervention

Method of measurement

Anxiety spielberger questionnaire

Secondary outcomes

1

Description

The average systolic blood pressure

Timepoint

20 minute after intervention

Method of measurement

Mercurial manometer

2

Description

Respiratory rate

Timepoint

20 minute after intervention

Method of measurement

Analog clock

3

Description

Heart rate

Timepoint

20 minute after intervention

Method of measurement

Analog clock

Intervention groups

1

Description

In aromatherapy group three drops of essential oils of Lemon verbena leaves will be used.and three drops of essential oils on a cotton ball shed, then put it in to jars

with lids. to each volunteer entrance to each group a jar will be given. The volunteer were asked to open the door of jars and keep it 10-7 cm from their nose and breathe normally for 20 minutes. The amount of Anxiety will be measured 20 minutes after that.

Category

Treatment - Drugs

2

Description

In control group three drops of distilled water will be used on a cotton ball shed, then put it into jars with lids. to each volunteer entrance to each group a jar will be given. The volunteer were asked to open the door of jars and keep it 10-7 cm from their nose and breathe normally for 20 minutes. The amount of Anxiety will be measured 20 minutes after that.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Azzahra hospital

Full name of responsible person

Katayoun Haryalchi

Street address

Azzahra hospital- Namjo street- Rasht

City

Rasht

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research and technology-Guilan University of Medical Sciences

Full name of responsible person

Dr. Shadman Nemati

Street address

Vice chancellor for research and technology- above the iran radiator representation- opposite sepah bank- western martyr Beheshti boulevard- gas square-Rasht-Guilan

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 and technology-Guilan 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

Para medical college- Guilan university of medical sciences

Full name of responsible person

Masoumeh Fotouhi

Position

Anesthesia student

Other areas of specialty/work

Street address

Para medical college- martyr yaghoob sheikhi street- Leyla kuh road- Langerud-Guilan

City

Langerud

Postal code

Phone

+98 13 4253 6262

Fax

+98 13 4253 7171

Email

atefe.fotuhi@gmail.com

Web page address

www.gums.ac.ir/para

Person responsible for scientific inquiries

Contact

Name of organization / entity

Para medical college- Guilan university of medical sciences

Full name of responsible person

Masoumeh Fotouhi

Position

Anesthesia student

Other areas of specialty/work

Street address

Para medical college- martyr yaghoob sheikhi street- Leyla kuh road- Langerud-Guilan

City

Langerud

Postal code

Phone

+98 13 4253 6262

Fax

+98 13 4253 7171

Email

atefe.fotuhi@gmail.com

Web page address

www.gums.ac.ir/para

Person responsible for updating data

Contact

Name of organization / entity
Para medical college- Guilan university of medical sciences

Full name of responsible person
Masoumeh Fotouhi

Position
Anesthesia student

Other areas of specialty/work

Street address
Para medical college- martyr yaghoob sheikhi street- Leyla kuh road- Langerud-Guilan

City
Langerud

Postal code

Phone
+98 13 4253 6262

Fax
+98 13 4253 7171

Email
atefe.fotuhi@gmail.com

Web page address
www.gums.ac.ir/para

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