

Clinical Trial Protocol

Iranian Registry of Clinical Trials

01 Aug 2026

The effect of lavender oil inhalation on anxiety level and cortisol concentration of open-heart surgery patients

Protocol summary

Summary

This study compared the effects of lavendula essence inhalation on the level of anxiety and cortisol concentrations in heart surgery patients . Inclusion criteria included people over 18 years, more than 20 anxiety score on Spielberger questionnaire, lack of drug addiction, no history of allergies to plants, non-psychiatric and anti-anxiety drugs, no diabetes, no steroid use In the past 3 months and the patient's desire to withdraw from the study is the exclusion criteria. The study population of 90 patients with cardiac surgery in kordkuy hospital are participating in this study .Intervention methods: the morning of surgery, after completing the consent form, demographic and vital signs measured and recorded and the gauges Spielberger Anxiety Inventory, which contains 20 questions to be completed and blood 2cc is to measure cortisol. The patients in the intervention group paper impregnated with 2 drops of lavender essential oil for 20 minutes and the control group paper impregnated with 2 drops of distilled water to be inhaled. After 20 minutes, once a patient has completed the questionnaire, and blood samples were taken and vital signs are recorded. Then the group of patients treated with 2 drops of essential oil of lavender cloth for 20 minutes and the control group tissues impregnated with 2 drops of distilled water to be inhaled. After 20 minutes completing the questionnaire and blood samples taken by patient and vital signs are recorded. Mdtkhlh for all patients between 7:30 to 8:30 in the morning is done.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201202068929N1**

Registration date: **2012-08-30, 1391/06/09**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-08-30, 1391/06/09

Registrant information

Name

Alemeh Heydari

Name of organization / entity

Golestan University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Golestan University of Medical Sciences

Expected recruitment start date

2012-06-21, 1391/04/01

Expected recruitment end date

2012-11-21, 1391/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of lavender oil inhalation on anxiety level and cortisol concentration of open-heart surgery patients

Public title

effect of aromatherapy on anxiety

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: Patients candidates for cardiac surgery ; age more than 18 years ; admitted in post ccu day before surgery ; ability for read and write, score over 20 on the Spielberger questionnaire ; no history of previous heart surgery ; no history of allergies to plants ; non-impaired sense of smell ; no acute pain at the time of intervention ; lack of drug addiction ; lack of psychiatric drugs use ; fill out the consent form . Exclusion criteria :Patients tend to withdraw from the study .

Age

From **18 years** old to **90 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **90**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Single blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Golestan University of Medical Sciences

Street address

Golestan University of Medical Sciences , Shastkola ,
Gorgan

City

Gorgan

Postal code

Approval date

2012-05-01, 1391/02/12

Ethics committee reference number

35/340/گ/ب

Health conditions studied

1

Description of health condition studied

anxiety

ICD-10 code

F41.1

ICD-10 code description

Generalized anxiety disorder

Primary outcomes

1

Description

anxiety

Timepoint

befor and after intervention

Method of measurement

Spielberger questionnaire

2

Description

cortisl

Timepoint

befor and after intervention

Method of measurement

blood sample

Secondary outcomes

1

Description

vital sign

Timepoint

befor and after intervention

Method of measurement

Manometer- inspection

Intervention groups

1

Description

Intervention group :Inhalation of 2 drop of lavender oil
for 20 minute on the morning of surgery.

Category

Placebo

2

Description

Control group : inhalation of two drops of distilled water
as placebo for 20 minute on a gas on the morning of
surgery .

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Amiralmomenin Hospital of Kordkouy

Full name of responsible person

Alemeh Heydari

Street address

Amiralmomenin Hospital , Jangal avenue , Kordkouy

City

Kordkouy

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Golestan University of Medical Sciences

Full name of responsible person

Dr Mohsen Arabi

Street address

Shastkola , Golestan University of Medical Sciences ,
Gorgan

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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

Golestan 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

Golestan University of Medical Sciences

Full name of responsible person

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Position

MSc student of critical care nursing

Other areas of specialty/work

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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

