

Clinical Trial Protocol

Iranian Registry of Clinical Trials

26 Feb 2026

Effect of Eucalyptus oil inhalation on pain and quality of life in patients with rheumatoid arthritis

Protocol summary

Study aim

The aim of this study was to determine the effect of inhalation of eucalyptus oil on the severity of pain and quality of life in patients with rheumatoid arthritis.

Design

The present study is a randomized clinical trial with two parallel groups which is done on 70 patients.

Settings and conduct

This study will be performed on 70 patients with rheumatoid arthritis admitted to the hospital. In the intervention group, 1 ml of Eucalyptus oil will be inhaled for 5 minutes. In the control group, distilled water will be used. The severity of pain and quality of life in patients will be evaluated using VAS and SF-12 questionnaires within a month.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Having at least one year of the definitive diagnosis of articular rheumatism, Absence of history of allergy, allergic rhinitis, asthma, and chronic pulmonary disease, No use of aromatherapy in the past month, Having complete and informed consent to participate in the study, Confirmed diagnosis of rheumatoid arthritis by the physician, Age between 18 and 60 years old Exclusion criteria: Allergy to eucalyptus, Changing the disease process, death, The patient migrates to another place

Intervention groups

In the intervention group: 1 ml of eucalyptus oil is poured on a 4 × 2 inch gas and placed at a distance of 30 cm from the nose of the patients and is inhaled for 5 minutes. The patient's pain will be evaluated using the VAS. In the control group: Except for routine medication and care, no special action will be taken.

Main outcome variables

pain; quality of life

General information

Reason for update

In the inclusion criteria section, instead of patients with rheumatoid arthritis, patients with MS are written.

Acronym

IRCT registration information

IRCT registration number: **IRCT20160110025929N15**

Registration date: **2018-10-07, 1397/07/15**

Registration timing: **registered_while_recruiting**

Last update: **2021-10-19, 1400/07/27**

Update count: **1**

Registration date

2018-10-07, 1397/07/15

Registrant information

Name

Mehdi Molavi Vardanjani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 81 3422 5056

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m.molavi@umsha.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-09-23, 1397/07/01

Expected recruitment end date

2019-09-23, 1398/07/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of Eucalyptus oil inhalation on pain and quality of

life in patients with rheumatoid arthritis

Public title

Effect of inhalation of eucalyptus oil on pain and quality of life

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Age between 18 and 60 years old
Confirmed diagnosis of rheumatoid arthritis by the physician
Having complete and informed consent to participate in the study
No use of aromatherapy in the past month
Absence of history of allergy, allergic rhinitis, asthma, and chronic pulmonary disease
Having at least one year of the definitive diagnosis of articular rheumatism

Exclusion criteria:

Allergy to eucalyptus
Changing the disease process
Death
The patient migrates to another place

Age

From **18 years** old to **60 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **70**

Randomization (investigator's opinion)

Randomized

Randomization description

70 patients will be selected through available sampling. Then the patients will be assigned to the groups using block randomization method.

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

Ethics Committee of Hamadan University of Medical Sciences

Street address

Hamadan University of Medical Sciences, Shahid Fahmideh Street

City

Hamadan

Province

Hamadan

Postal code

38698-65178

Approval date

2018-09-01, 1397/06/10

Ethics committee reference number

IR.UMSHA.REC.1397.408

Health conditions studied

1

Description of health condition studied

Rheumatoid Arthritis

ICD-10 code

M05.10

ICD-10 code description

Rheumatoid lung disease with rheumatoid arthritis of unspecified site

Primary outcomes

1

Description

Quality of life

Timepoint

Before and after intervention

Method of measurement

SF-12 Questionnaire

2

Description

Pain

Timepoint

Before and after intervention

Method of measurement

Visual Analog Scale

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: 1 ml of eucalyptus oil is poured on a 4 × 2 inch cloth and placed at a distance of 30 cm from the nose of the patients and inhaled for 5 minutes.

Category

N/A

2

Description

Control group: 1 ml of distilled water is poured on a 4 × 2 inch cloth and placed at a distance of 30 cm from the nose of the patients and inhaled for 5 minutes.

Category

N/A

Type of organization providing the funding
Academic

Recruitment centers

1

Recruitment center

Name of recruitment center

Beheshti hospital

Full name of responsible person

Arezoo Karampourian

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Beheshti hospital, Beheshti Street

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Saeed Bashirian

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Grant name

Grant code / Reference number

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

No

Title of funding source

Deputy of Research and Technology

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

Person responsible for general inquiries

Contact

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Arezoo Karampourian

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

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Person responsible for scientific inquiries

Contact

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Hamedan University of Medical Sciences

Full name of responsible person

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Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

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Person responsible for updating data

Contact

Name of organization / entity

Hamedan University of Medical Sciences

Full name of responsible person

Zahra Kord

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Nursery

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available