

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jul 2026

Comparison of the effect of aromatherapy massage with lavender and ginger essential oil on pain, joint stiffness and physical function in patients with knee osteoarthritis

Protocol summary

Study aim

Determining the effect of aromatherapy massage with lavender and ginger essential oil on pain, joint dryness and physical function in patients with knee osteoarthritis

Design

Clinical examination work with control group, with parallel, randomized group 2 phases on 120 patients

Settings and conduct

After visiting the rheumatology clinic and random selection, patients were divided into 4 groups, two intervention groups, each containing lavender 3% oil and ginger 3%, and the placebo group sesame oil and the control group did not receive any medication. Only the interventionist and the analyst were unaware of the groups studied

Participants/Inclusion and exclusion criteria

1=Lack of treatment with injectable steroids and physiotherapy 2=Take the same medication as your doctor advised to relieve pain 3=Written personal consent 4=Approval of primary knee osteoarthritis by a rheumatologist 5=Knee surgery during the study 6=Lack of willingness to continue participating in the study

Intervention groups

Patients in lavender, ginger, and sesame groups were given essential oils, but patients in the control group did not receive any essential oil.

Main outcome variables

Using the results of this research and if the therapeutic effects of ginger oil are proven and compared with lavender, it can be used in better treatment with less pain, joint dryness and quality of physical performance of patients with knee osteoarthritis.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200314046772N1**

Registration date: **2020-06-22, 1399/04/02**

Registration timing: **retrospective**

Last update: **2020-06-22, 1399/04/02**

Update count: **0**

Registration date

2020-06-22, 1399/04/02

Registrant information

Name

iran hayati

Name of organization / entity

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Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-12-22, 1398/10/01

Expected recruitment end date

2020-03-20, 1399/01/01

Actual recruitment start date

2019-12-22, 1398/10/01

Actual recruitment end date

2020-03-15, 1398/12/25

Trial completion date

2020-03-15, 1398/12/25

Scientific title

Comparison of the effect of aromatherapy massage with lavender and ginger essential oil on pain, joint stiffness

and physical function in patients with knee osteoarthritis

Public title
Comparison of the effect of aromatherapy massage with lavender and ginger essential oil on pain, joint stiffness and physical function in patients with knee osteoarthritis

Purpose
Supportive

Inclusion/Exclusion criteria
Inclusion criteria:
1. Approval of primary knee osteoarthritis by a rheumatologist Be able to understand the explanations and complete the interview Written personal consent Age 25-75 years Lack of cancer, pregnancy and coagulation disorders such as hemophilia, asthma (steroid use) Lack of treatment with injectable steroids and physiotherapy No ulcers above the knee joint The duration of the disease is at least 2 years No odor problem Lack of food and drug sensitivity and intolerance Take the same medication as your doctor advised to relieve pain No history of knee joint surgery No symptoms of acute infection at the knee joint Do not take any drugs (no addiction)
Exclusion criteria:
Knee surgery during the study Prescribe physiotherapy for knee pain during the study Allergic reactions to ginger and lavender during the study Lack of willingness to continue participating in the study Increased pain intensity and uncontrollability with prescription drugs Occurrence of any health problem that, at the discretion of the physician in question, is a continuation of the intervention to the detriment of the sample Hospitalization for any reason Do not take the drug more than once a week Take any drugs Oral ginger and lavender

Age
From **25 years** old to **75 years** old

Gender
Both

Phase
2-3

Groups that have been masked
No information

Sample size
Target sample size: **140**
Actual sample size reached: **120**

Randomization (investigator's opinion)
Randomized

Randomization description
After obtaining written consent from the patients, those who have the conditions to enter the intervention should randomly select the card from the bag mentioned on the intervention groups and in one of the studied groups (ginger, lavender, Sesame and control)

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

Birjand University of Medical Sciences Ethics Committee

Street address

Ghaffari Street 21

City

birjand

Province

South Khorasan

Postal code

9۷۱۷۸۵۳۵۷۷

Approval date

2019-11-30, 1398/09/09

Ethics committee reference number

IR.BUMS.REC.1398.269

Health conditions studied

1

Description of health condition studied

Knee osteoarthritis

ICD-10 code

M17

ICD-10 code description

Osteoarthritis of knee

Primary outcomes

1

Description

Pain score in WOMAC questionnaire

Timepoint

Before intervention, Immediately after the intervention, 2 weeks after the intervention, 4 weeks after the intervention

Method of measurement

womac questionnaire

2

Description

stiffness joint score in WOMAC questionnaire.

Timepoint

Before intervention, Immediately after the intervention, 2 weeks after the intervention, 4 weeks after the intervention

Method of measurement

womac questionnaire

3

Description

Physical performance score in the WOMAC questionnaire

Timepoint

Before intervention, Immediately after the intervention, 2 weeks after the intervention, 4 weeks after the intervention

Method of measurement

womac questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

groups involved(1), lavender 3% prepared by Noshad factory and they were asked to massage the oil on their knees once a day for 4 weeks and 20 minutes each time in a relaxed state.

Category

Rehabilitation

2

Description

groups involved(2), involved ginger 3% made prepared by Noshad factory and they were asked to massage the oil on their knees once a day for 4 weeks and 20 minutes each time in a relaxed state.

Category

Rehabilitation

3

Description

groups involved(3).The placebo group was given 50 cc of sesame oil prepared by Noshad factory and they were asked to massage the oil on their knees once a day for 4 weeks and 20 minutes each time in a relaxed state.

Category

Placebo

4

Description

Control group: This group of patients performed only routine care

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Birjand Health Centers

Full name of responsible person

Ahmad Nasiri Forg

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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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

Birjand University of Medical Sciences

Proportion provided by this source

90

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

Birjand University of Medical Sciences

Full name of responsible person

Somayeh Hayati
Position
Master's degree in nursing (medical-surgical)
Latest degree
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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

Information about the main consequence or the like can be shared.

When the data will become available and for how long

Start the access period from 1400 and after printing the results

To whom data/document is available

In case of further study in this field and related studies

Under which criteria data/document could be used

In case of further study in this field and related studies

From where data/document is obtainable

Birjand University of Medical Sciences, Central Library

What processes are involved for a request to access data/document

It must be pursued through the university

Comments