

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Jul 2026

Compare the effect of acupressure and aromatherapy on pain of knee in patients with multiple sclerosis (MS) referred to specific diseases center of Rafsanjan city in 2017

Protocol summary

Study aim

Comparison of the mean scores of pain in patients with multiple sclerosis in the aromatherapy group and acupressure group after intervention

Design

The study population consisted of patients with multiple sclerosis referred to Rafsanjan Special Disease Center. The sample size was estimated to be 30 individuals. Data collection tools included demographic information questionnaire, self-report form of pain characteristics. Samples were randomly divided into two groups, including aromatherapy and acupuncture. In the first group, lavender extract was administered 2% to the patients by fumigation machine. In the second group, acupressure was given to this group of necessary training and interventions

Settings and conduct

The study was performed at the Rafsanjan Special Disease Center. Samples were randomly assigned to acupuncture and aromatherapy. In the first group, 2% lavender extract was administered to patients by fumigation device. In the second group, acupressure group received necessary training and interventions. Visual Analogue Scale checklist was used before and after the intervention.

Participants/Inclusion and exclusion criteria

The criteria for entering the study include: 1- Having no swelling and numbness at the Hugu point 2. Having periodic examination records at the Rafsanjan Special Medical Center 3. Not having a history of using acupressure for any purpose Exclusion criteria: 1. Reduced level of consciousness 2. The patient's unwillingness to continue cooperation.

Intervention groups

Interventions were performed in two groups of acupressure and aromatherapy. Samples were assigned to two acupressure and aromatherapy groups by random

sampling. In the first group, lavender extract of 2% was administered to the patients by inhalation apparatus. In the second group, acupressure was given to this group of training and interventions

Main outcome variables

knee pain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20181029041497N1**

Registration date: **2019-09-28, 1398/07/06**

Registration timing: **retrospective**

Last update: **2019-09-28, 1398/07/06**

Update count: **0**

Registration date

2019-09-28, 1398/07/06

Registrant information

Name

Hossein Baghari nasab

Name of organization / entity

Country

Iran (Islamic Republic of)

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+98 34 3429 1350

Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2017-09-06, 1396/06/15

Expected recruitment end date

2018-03-02, 1396/12/11
Actual recruitment start date
 2017-09-27, 1396/07/05
Actual recruitment end date
 2018-03-04, 1396/12/13
Trial completion date
 2018-12-17, 1397/09/26

Scientific title
 Compare the effect of acupressure and aromatherapy on pain of knee in patients with multiple sclerosis (MS) referred to specific diseases center of Rafsanjan city in 2017

Public title
 Compare the effect of acupressure and aromatherapy on pain of knee in patients with multiple sclerosis (MS)

Purpose
 Supportive

Inclusion/Exclusion criteria
Inclusion criteria:
 Not having the experience of using complementary medicine for any purpose Having informed consent to participate in the study Having a minimum score of 1 pain based on the scale of pain measurement The lack of drug addiction No injection of housing within 30 days before intervention Having periodic examination records at the Rafsanjan Special Medical Center Lack of olfactory disorder Not having swollen and numbness at Hugo's point Age range from 15 to 40 years
Exclusion criteria:
 Changes in health status so that the patient can not continue to research Loss of consciousness Unwillingness to continue cooperation

Age
 From **15 years** old to **40 years** old

Gender
 Both

Phase
 2

Groups that have been masked
No information

Sample size
 Target sample size: **35**
 Actual sample size reached: **30**

Randomization (investigator's opinion)
 Randomized

Randomization description
 Since 30 patients were identified at Rafsanjan Special Disease Center, the samples were divided into two groups according to age and sex in two groups: acupuncture and aromatherapy.

Blinding (investigator's opinion)
 Not blinded

Blinding description

Placebo
 Not used

Assignment
 Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee on Biomedical Research in Rafsanjan University of Medical Sciences

Street address

, No12 ,Kojeh No. 3 , Street hojat

City

rafsanjan

Province

Kerman

Postal code

7717795931

Approval date

2017-10-09, 1396/07/17

Ethics committee reference number

IR.RUMS.REC.1396.144

Health conditions studied

1

Description of health condition studied

Multiple sclerosis

ICD-10 code

G35

ICD-10 code description

Multiple sclerosis

Primary outcomes

1

Description

Measuring the amount of pain in the knee

Timepoint

Knee pain was measured three times before the intervention, immediately after intervention and one week after the intervention.

Method of measurement

Visual Analogue Scale

Secondary outcomes

1

Description

knee pain

Timepoint

Before intervention, after intervention and one week after intervention

Method of measurement

Pain measurement scale (vas)

Intervention groups

1

Description

Intervention group 1: Acupressure was performed in Hegu area for one minute and three consecutive nights before bedtime by a pre-trained patient.

Category

Treatment - Other

2

Description

Intervention group 2: 2 ml aromatherapy extract of aromatherapy extract, by night-time incubation until dawn, for 3 consecutive nights, pure lavender extract of Stoechas essential oil of Kashan Baridj Co. It was prepared.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Special Diseases Center of Rafsanjan

Full name of responsible person

Gollamhossein Abdeyazdan

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No12. ,, Alley No. 3, Street hojat

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Rafsanjan University of Medical Sciences

Full name of responsible person

Ali Shamsizadeh

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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

Rafsanjan University of Medical Sciences

Proportion provided by this source

10

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

Islamic Azad University

Full name of responsible person

Gollamhossein Abdeyazdan

Position

MSc in medical_surgical nursing

Latest degree

Master

Other areas of specialty/work

Nursery

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Person responsible for scientific inquiries

Contact

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Islamic Azad University

Full name of responsible person

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Position

2- MSc in medical_surgical nursing

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Person responsible for updating data

Contact

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Full name of responsible person
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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

Sample data such as pain assessment score and demographic information form have been recorded

When the data will become available and for how long

Get started since 1397

To whom data/document is available

Researchers at Rafsanjan University of Medical Sciences

Under which criteria data/document could be used

The use of data is subject to authorization from the research department of Rafsanjan University of Medical Sciences

From where data/document is obtainable

Researchers Phone Number

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

After obtaining a license from Lazmazsoo Vice-Chancellor for Research in Rafsanjan University of Medical Sciences and contacting researchers, this study provides enough information.

Comments