Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison the effects of 5-week myofascial self-release and massage therapy in women with myofascial pain syndrome of Trapezius muscle: clinical trials

Protocol summary

Study aim

The general purpose of this research is to compare the effect of myofascial self-release exercises and massage for 5 weeks on complications caused by trapezius muscle myofascial pain syndrome.

Design

The clinical trial has a control group and two experimental groups, which are one-sided blind parallel groups, randomized on 45 people with trapezius muscle myofascial pain syndrome disorder, which randomization will be done by lottery.

Settings and conduct

The research process includes pre-test stages, intervention for 5 weeks, post-test. The procedure is performed in the girls' dormitory of Shahid Beheshti University. During the intervention stages, the massage group received myofascial release massage in the trapezius muscle area, while the training group received myofascial self-release exercises by foam roll and tennis ball.

Participants/Inclusion and exclusion criteria

Women with myofascial pain syndrome and active trigger points in their trapezius muscle, who have no surgery or disorder in the cervical and thoracic spine ,sensitivity to massage oils, skin disease and open wound in the intervention area.

Intervention groups

first experimental group interventions include massage in the trapezius muscle for a specific period of time. In the second experimental group, the intervention of myofascial self-release exercises using foam roll and tennis ball will be used in areas with trigger points in the trapezius muscle. Soft warm-up exercises will be applied in the control group during the intervention period.

Main outcome variables

The disabilities of the arm, shoulder and hand (DASH) questionnaire The visual analog scale (VAS) brief pain inventory Ober pain questionnaire flexion, extension, left and right rotation, left and right flexion range of motion flexion, extension, abduction, internal and external rotation of left and right arm

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230914059432N1**
Registration date: **2024-03-29, 1403/01/10**
Registration timing: **retrospective**

Last update: **2024-03-29, 1403/01/10**
Update count: **0**

Registration date

2024-03-29, 1403/01/10

Registrant information

Name

Sara Matinfard

Name of organization / entity

Faculty of Physical Education and Sport Sciences, University shahid beheshti

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-09-29, 1402/07/07

Expected recruitment end date

2023-11-28, 1402/09/07

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison the effects of 5-week myofascial self-release and massage therapy in women with myofascial pain syndrome of Trapezius muscle: clinical trials

Public title

Comparison the effects of 5-week myofascial self-release and massage therapy in women with myofascial pain syndrome of Trapezius muscle: clinical trials

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Having active trigger points in the trapezius muscle Not using an exercise program or any other modalities which can effects persons pain experience caused by trigger points during the research period. Female gender Absence of pregnancy induvial must not any history of surgery or disorder in the cervical and thoracic spine Not having skin diseases and open wounds Not having an allergy to massage oils The minimum age is 20 and the maximum is 30

Exclusion criteria:

Use of alcohol and other drugs Not participating in massage sessions or training for two consecutive sessions Dissatisfaction with the continuation of the activity and cooperation in the current research Absence of individual during the pre-test and post-test session

Age

From **20 years** old to **30 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **45**

Randomization (investigator's opinion)

Randomized

Randomization description

The names of the people will be written on similar sheets and the names are drawn randomly in the form of a lottery. The first 15 people will be divided into experimental group one, the second 15 people will be divided into experimental group two, and the third 15 people will be divided into the control group..

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Shahid Beheshti University

Street address

No. 2, Sepas AVE., Beh Afarin St., Karimkhan BLVD., Tehran Town

City

Tehran

Province

Tehran

Postal code

15938566314

Approval date

2023-05-29, 1402/03/08

Ethics committee reference number

IR.SBU.REC.1402.067

Health conditions studied

1

Description of health condition studied

myofascial pain syndrome

ICD-10 code

G89.29

ICD-10 code description

Other chronic pain

Primary outcomes

1

Description

trigger points pain

Timepoint

Pain measurement will be done at the beginning of the study during the pre-test stage and at the end of the study in the post-test stage

Method of measurement

Using The visual analog scale (VAS) and The Brief Pain Inventory (BPI)

2

Description

Neck range of motion in flexion, extension, rotation, and lateral flexion movements

Timepoint

Range of motion measurement will be done at the beginning of the study during the pre-test stage and at the end of the study in the post-test stage

Method of measurement

Using Goniometer

3

Description
Shoulder range of motion in flexion, extension, abduction, internal and external rotation
Timepoint
Range of motion measurement will be done at the beginning of the study during the pre-test stage and at the end of the study in the post-test stage
Method of measurement
Using Goniometer

4

Description
Hand and shoulder performance quality
Timepoint
Hand and shoulder performance quality will be measured at the beginning of the study during the pre-test stage and at the end of the study in the post-test stage
Method of measurement
The disabilities of the arm, shoulder and hand (DASH) questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
The first intervention group: myofascial release massage for 2 days a week with variable times (gradual increase each week) for 5 weeks in which Swedish massage techniques will be used in the trapezius muscle area.
Category
Treatment - Other

2

Description
second intervention group: Myofascial self-release for 2 sessions per week for 5 weeks using foam roll and tennis ball in variable durations (gradual increase each week).
Category
Treatment - Other

3

Description
Control group: Soft exercise activity similar to warm-up is done for a short period of time for this group of people.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Beheshti university
Full name of responsible person
Sara Matin Fard
Street address
NO. 2, Sepas Ave., Beh Afrin St., karimkhan Blvd., Theran Town
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Afshar Jafari
Street address
No. 2, Sepas Ave., Beh Afrin St., Karim Khan Blvd., Tehran Town
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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
Shahid Beheshti University Faculty of Sports Sciences and Health
Proportion provided by this source
1
Public or private sector
Private
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
Shahid Beheshti University Faculty of Sports Sciences and Health

Full name of responsible person
Sara Matinfard

Position
university student

Latest degree
Bachelor

Other areas of specialty/work
Sport injuries and corrective exercise

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD
The final results of the current research will be published in the form of statistical analysis in the form of articles or dissertations and not in the form of raw data of individual participants.

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

Clinical Study Report
Yes - There is a plan to make this available

Analytic Code
Not applicable

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

Title and more details about the data/document
The information and statistical analyzes carried out in the format of articles and dissertations will be shared from the results of this research. Thesis title: Comparison of the effect of 5 weeks of myofascial self-release and massage on women with myofascial pain syndrome of the trapezius muscle: a clinical trial Possible title of the article: Comparison of the effect of 5 weeks of myofascial self-release and massage on women with myofascial pain syndrome of the trapezius muscle: a clinical trial

When the data will become available and for how long
The access period starts after the registration of the final thesis in the period of January 1402 to January 1403.

To whom data/document is available
Researchers interested in the field of myofascial pain

syndrome, self-release and massage

Under which criteria data/document could be used

It is possible for other researchers to cite the results of this research (by mentioning its source).

From where data/document is obtainable

Researchers can contact the author through the following email address in order to obtain information about the article: s.matinfard@sbu.ac.ir

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

After introducing his field of study and why he wants to study the information of the current study in the text of the email, the applicant can receive the desired data up to a maximum of 2 weeks after receiving the mentioned email and its review by the author.

Comments