

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Comparative effects of Bowen therapy and tennis ball technique on pain and functional disability in patients with thoracic myofascial pain syndrome

Protocol summary

Study aim

To compare the effects of Bowen therapy and tennis ball technique on pain and functional disability in patients with thoracic myofascial pain syndrome

Design

This study will be Randomized Clinical Trial, parallel-group, triple blinded

Settings and conduct

The trial would be conducted in District Headquarters Hospital Kasur. it would be triple blinded, as the patients, assessor and analyzer would be blinded.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Both male and female patients; Age group 18-40 years old; Only patients reporting pain on numeric pain rating scale above 4; Individuals fulfilling the criteria of five major(spontaneous pain, palpable taut band, localized sharp tenderness, referred pain, decreased ROM) and at least one out of three minor signs (pain on pressure, local twitch response (LTR), decrease in pain by muscle stretching) of myofascial pain syndrome will be included. Exclusion criteria: Patients with fibromyalgia; Individuals with any other deformity like scoliosis; Participant taking anti-inflammatory drugs will be excluded.

Intervention groups

Intervention group: group A will receive Bowen therapy, the position of ease will be produced and then small moves at varying pressure will be applied. The treatment will include light, cross-fibre manoeuvres of muscle, tendon with no forceful manipulation. one session will take 15-20 minutes. Intervention group: group B will receive tennis ball technique, position of ease either standing or lying will be achieved, then placing a tennis ball between the body and the wall or floor, Rolling the ball across these areas for a short time will relax the knot. it will take 10 -15 minutes.

Main outcome variables

Pain; Functional Disability

General information

Reason for update

trial completed

Acronym

RCT

IRCT registration information

IRCT registration number: **IRCT20190717044238N7**

Registration date: **2023-03-19, 1401/12/28**

Registration timing: **registered_while_recruiting**

Last update: **2023-08-19, 1402/05/28**

Update count: **1**

Registration date

2023-03-19, 1401/12/28

Registrant information

Name

Fareeha Amjad

Name of organization / entity

The University of Lahore

Country

Pakistan

Phone

+92 42 99200600

Email address

fari_fairy22@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-03-06, 1401/12/15

Expected recruitment end date

2023-06-06, 1402/03/16

Actual recruitment start date

2023-03-01, 1401/12/10
Actual recruitment end date
 2023-06-09, 1402/03/19
Trial completion date
 2023-06-09, 1402/03/19

Scientific title
 Comparative effects of Bowen therapy and tennis ball technique on pain and functional disability in patients with thoracic myofascial pain syndrome

Public title
 Bowen therapy and tennis ball technique in patients with thoracic myofascial pain syndrome

Purpose
 Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
 Both male and female patients Age group 18-40 years
 Only patients reporting pain on numeric pain rating scale above 4 Individuals fulfilling the criteria of five major(spontaneous pain, palpable taut band, localized sharp tenderness, referred pain, decreased ROM) and at least one out of three minor signs (pain on pressure, local twitch response (LTR), decrease in pain by muscle stretching) of myofascial pain syndrome will be included.
Exclusion criteria:
 Patients with fibromyalgia Individuals with any other deformity like scoliosis. Participant taking anti-inflammatory drugs will be excluded

Age
 From **18 years** old to **40 years** old

Gender
 Both

Phase
 3

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

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

Randomization (investigator's opinion)
 Randomized

Randomization description
 As per the inclusion and exclusion criteria of the study, patients will be divided into two groups randomly by Random Number Generator table.

Blinding (investigator's opinion)
 Triple blinded

Blinding description
 The patients taking part in the study would be blinded, they would not be able to know the group they have been allocated to, either Bowen therapy or tennis ball technique, The assessor of the outcomes would be blinded and lastly, our data analyzer would be blinded too, making it a triple blind clinical trial.

Placebo
 Not used

Assignment

Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research and Ethical Review Committee

Street address

Riphah Quaid e Azam Campus,28-M Quaid-e-Azam industrial Estate, Kot lakhpat,Lahore

City

Lahore

Postal code

54000

Approval date

2023-01-02, 1401/10/12

Ethics committee reference number

REC/RCR & AHS/23/0111

Health conditions studied

1

Description of health condition studied

Thoracic myofascial pain syndrome

ICD-10 code

M70.9

ICD-10 code description

Unspecified soft tissue disorder related to use, overuse and pressure

Primary outcomes

1

Description

Pain

Timepoint

Total intervention protocol will be given for four weeks of duration, 3 sessions per week with total 12 sessions. Outcomes will be assessed at baseline, at the end of 2nd week (6th session) and at the end of the 4th week (12th session)

Method of measurement

Numeric Pain Rating Scale (NPRS)

Secondary outcomes

1

Description

Functional Disability

Timepoint

Total intervention protocol will be given for four weeks of

duration, 3 sessions per week with total 12 sessions.
Outcomes will be assessed at baseline, at the end of 2nd week (6th session) and at the end of the 4th week (12th session)

Method of measurement

Pain Disability Questionnaire

Intervention groups

1

Description

Intervention group: group A will receive Bowen therapy, the position of ease will be produced and then small moves at varying pressure will be applied. The treatment will include light, cross-fibre manoeuvres of muscle, tendon with no forceful manipulation. one session will take 15-20 minutes

Category

Treatment - Other

2

Description

Intervention group: group B will receive tennis ball technique, position of ease either standing or lying will be achieved, then placing a tennis ball between the body and the wall or floor, Rolling the ball across these areas for a short time will relax the knot. it will take 10 -15 minutes.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

DHQ hospital Kasur

Full name of responsible person

Dr. Anum Sarwar

Street address

Muslim town Lahore

City

Lahore

Postal code

54700

Phone

+92 333 6471197

Email

anumsarawar11@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Ripah international university Lahore

Full name of responsible person

Dr. Fareeha Amjad

Street address

Ripah international university Maddar e Millat Road,
Quaid e Azam industrial Estate Lahore, Punjab

City

lahore

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54000

Phone

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fareeha.amjad@ripath.edu.pk

Grant name

Grant code / Reference number

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

No

Title of funding source

Ripah International University Lahore

Proportion provided by this source

100

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

Ripah International University Lahore

Full name of responsible person

Afsheen Khalid

Position

student

Latest degree

Master

Other areas of specialty/work

Physiotherapy

Street address

Khalid Mahmood House opposite Javaid Abdullah
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Province

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Person responsible for updating data

Contact

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Postal code

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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

No - There is not 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

Not applicable

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

Consent form in its original format with no information
about any participant study protocol- how the
intervention was given to both groups

When the data will become available and for how long

Data will be available after the completion of research at
the end of 2023

To whom data/document is available

People working in an academic and clinical setting can
have access to the above mentioned
information/documents

Under which criteria data/document could be used

Data can be only used for Research Purposes

From where data/document is obtainable

Data can be asked for at the following email address:
afsheenkhalid11@gmail.com

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

One can ask for data at the given email address and it
would be provided after knowing the general implications
of sharing that particular data.

Comments