Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effects of Muscle Energy Technique with and without Bowen Therapy on pain and function in Text Neck Syndrome

Protocol summary

Study aim

To determine the effects of MET with and without Bowen therapy on pain intensity, cervical ROM and functional performance in text neck syndrome.

Design

A randomized controlled not blind trial. Sample size 22 divided in 2 groups. Total 18 treatment sessions will be given to subjects in 6 weeks with 3 sessions/week. Followup at 9th week.

Settings and conduct

Setting: Fatima Hospital, University road Sargodha, Pakistan

Participants/Inclusion and exclusion criteria

Inclusion Criteria: Young adults (both genders, age 18-35 year), Smart phone usage> 2 hrs/day, Neck pain which is increased by sustained posture and stiffness on turning the head and neck after long usages, CVA>50° and RSA>52°, NPRS>5 and NDI>10 Exclusion Criteria: Spinal infection or inflammatory disorder, Neck surgery or trauma, Torticollis, scoliosis,Malignancy, pregnancy, Diagnosed cases of disc prolapse, stenosis, herniation, spondylolisthesis and osteoporosis,Current use of any medication or physical therapy treatment.

Intervention groups

Patients will be randomly divided into two groups with 11 subjects in each group. After taking baseline assessment both groups A and B will be treated with Hot pack for 7-10 minutes and then MET will be performed for upper trapezius, levator scapulae and rhomboids. Post isometric relaxation method will be used. Moderate isometric contraction will be performed for 5 seconds followed by relaxation period of 3 seconds. One set of 5 Rep for each muscle and 3 sessions/week on alternate days will be given for 6 weeks. In addition to this, Bowen therapy will be performed over same muscle groups for Group B. 3 sessions/week on alternate days will be given for 6 weeks. Treatment time of each session will be approximately 15-20 minutes.

Main outcome variables

Pain(NPRS), Functional performance(NDI), Cervical AROM's(Universal Goniometer)

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200513047421N1**
Registration date: **2020-06-02, 1399/03/13**
Registration timing: **prospective**

Last update: **2020-06-02, 1399/03/13**
Update count: **0**

Registration date

2020-06-02, 1399/03/13

Registrant information

Name
Pakeeza Seemal
Name of organization / entity
Riphah International University
Country
Pakistan
Phone
+92 48 3256502
Email address
pakeezaseemal212@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-06-15, 1399/03/26

Expected recruitment end date

2020-07-15, 1399/04/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effects of Muscle Energy Technique with and without Bowen Therapy on pain and function in Text Neck Syndrome

Public title

Effects of Muscle Energy Technique with and without Bowen Therapy on pain and function in Text Neck Syndrome

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Young adults (male and females, 18-35 years age) Using smart phone for more than 2 hours a day Having neck pain which is increased by sustained posture and feeling of stiffness on turning the head and neck after long usages Craniovertebral angle>50° and Rounded shoulder angle Score of more than 5 on NPRS and more than 10 on NDI Willing to participate

Exclusion criteria:

Spinal infection or inflammatory disorder Neck surgery or trauma Torticollis , Scoliosis Malignancy, pregnancy Diagnosed cases of disc prolapse, stenosis, herniation, spondylolisthesis and osteoporosis Current use of any medication or physical therapy treatment

Age

From **18 years** old to **35 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **22**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization by lottery method. Allocation concealment through sealed envelopes.

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Non-probability convenient sampling technique will be used to recruit the individuals for the study and then randomization will be done by lottery method to divide the individuals in control and experimental groups. Sealed envelops will be used for allocation concealment.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Riphah College of Rehabilitation Sciences (RCRS) Research Ethical Committee (REC)

Street address

near Hajj Complex, 1-14, Islamabad, Islamabad Capital Territory

City

Islamabad

Postal code

46000

Approval date

2019-11-30, 1398/09/09

Ethics committee reference number

RCRS-RE-MS-OMPT/Spring 19/019

Health conditions studied

1

Description of health condition studied

Text neck or Turtle neck posture, can be described as a repeated stress injury and pain sustained from excessive watching or texting on handheld devices for long periods of time. It can cause many harmful symptoms such as neck pain, shoulder pain, upper back pain, chronic headaches and increased curvature of the spine.Untreated text neck can result into serious permanent damage.

ICD-10 code

M54.2

ICD-10 code description

Text Neck Syndrome

Primary outcomes

1

Description

Pain

Timepoint

before treatment, during treatment (3rd week), after treatment (6th week), followup (9th week)

Method of measurement

Numeric Pain Rating Scale (NPRS)

2

Description

Functional performance

Timepoint

before treatment, during treatment (3rd week), after treatment (6th week), followup (9th week)

Method of measurement

Neck Disability Index (NDI)

3

Description
Cervical AROM
Timepoint
before treatment, during treatment (3rd week), after treatment (6th week), followup (9th week)
Method of measurement
Universal Goniometer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: After taking baseline measures, Group A will be treated with hot pack for 7-10 min. MET will be performed for trapezius, levator scapulae and rhomboids on both right and left sides. Post isometric relaxation technique will be used. Moderate isometric contraction will be performed for 5 seconds followed by relaxation period of 3 seconds. One set of 5 repetitions for each muscle and 3 sessions per week on alternate days will be given for 6 weeks.
Category
Treatment - Other

2

Description
Intervention group: After taking baseline measures, group B will be treated with hot pack for 7-10 min and MET will be performed for trapezius, levator scapulae and rhomboids on both right and left sides. Post isometric relaxation technique will be used. Moderate isometric contraction will be performed for 5 seconds followed by relaxation period of 3 seconds. One set of 5 repetitions for each muscle and 3 sessions per week on alternate days will be given for 6 weeks. In addition to this, Bowen therapy for same muscle groups will be performed. 3 sessions per week on alternate days will be given for 6 weeks. Treatment time of each session will be approximately 15-20 minutes.
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Fatima Hospital, University road Sargodha, Pakistan
Full name of responsible person
Pakeeza Seemal
Street address
University road, Sargodha
City
Sargodha
Postal code
40100
Phone
+92 48 3215548
Email
pakeezaseemal212@gmail.com
Web page address
https://www.marham.pk/hospitals/sargodha/fatima-hospital/university-road

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Fatima Hospital, Sargodha
Full name of responsible person
Pakeeza Seemal
Street address
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Web page address
https://www.marham.pk/hospitals/sargodha/fatima-hospital/university-road
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Fatima Hospital, Sargodha
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
Other

Person responsible for general inquiries

Contact
Name of organization / entity
Riphah International University Lahore, Pakistan
Full name of responsible person
Pakeeza Seemal
Position
Student
Latest degree
Bachelor

Other areas of specialty/work
Physiotherapy
Street address
House# 411, street#07, Al Farooq colony, Sargodha
City
Sargodha
Province
Punjab
Postal code
40100
Phone
+92 48 3726938
Email
pakeezaseemal212@gmail.com
Web page address
https://www.marham.pk/hospitals/sargodha/fatima-hospital/university-road

Person responsible for scientific inquiries

Contact
Name of organization / entity
Riphah College of Rehabilitation Sciences (RCRS)
Full name of responsible person
Pakeeza Seemal
Position
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Other areas of specialty/work
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Person responsible for updating data

Contact
Name of organization / entity
Riphah College of Rehabilitation Sciences (RCRS)
Full name of responsible person
Pakeeza Seemal
Position
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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
There is no further decision and information is decided yet
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