

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 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 envelopes 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**

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>

#### **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**

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40100

**Phone**

+92 48 3726938

**Email**

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**Web page address**

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**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Riphah College of Rehabilitation Sciences (RCRS)

**Full name of responsible person**

Pakeeza Seemal

**Position**

Student

**Latest degree**

Bachelor

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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**

student

**Latest degree**

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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