Clinical Trial Protocol
Iranian Registry of Clinical Trials
04 Jul 2022

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
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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
**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.

**Ethics committees**

**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**

**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**

**Description**

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

**Method of measurement**
Numeric Pain Rating Scale (NPRS)

**Secondary Ids**
empty
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
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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Latest degree
Bachelor
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https://www.marham.pk/hospitals/sargodha/fatima-hospital/university-road

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

Person responsible for updating data

Contact