

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effects of Kendall exercise versus Gong's mobilization on pain, range of motion, function and strength in text neck syndrome.

#### Protocol summary

##### Study aim

To determine the effects of Kendall exercises & Gong's mobilization on pain, Range of motion, Function & strength in Text neck syndrome

##### Design

A randomized controlled trail, not blind trial, 2 group.

##### Settings and conduct

Fatima Hospital, University road Sargodha, Pakistan

##### Participants/Inclusion and exclusion criteria

inclusion criteria: Young adults (male & female, 18-35 years age), Using smart phone > 2 hours a day, CVA < 50° & RSA > 52°, NPRS > 5 & NDI > 10, Having neck pain which is increased by sustained posture and feeling of stiffness on turning the head and neck after long usages. exclusion criteria: Inflammatory disorder, Neck trauma, Malignancy, pregnancy, 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 12 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 Kendall exercises will be performed, Strengthening the deep cervical flexors, Stretching the cervical extensors, strengthening shoulder retraction, stretching the pectoralis muscle. 5 sets consisting of 12 repetitions of postures, each taking 30 seconds, 3 sessions/week on alternate days will be given. In addition to this, Gong's Mobilization group will receive concurrent application of apophyseal joint gliding and end range passive physiological movements while the patients' cervical postures will passively neutral in order to induce normal cervical extension. 10-15 repetition, 3 sessions/week on alternate days will be given for 6 weeks. Treatment time of each session will be approximately 20-30 minutes.

##### Main outcome variables

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

(Sphygmomanometer)

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20201019049069N1**

Registration date: **2021-01-13, 1399/10/24**

Registration timing: **retrospective**

Last update: **2021-01-13, 1399/10/24**

Update count: **0**

##### Registration date

2021-01-13, 1399/10/24

##### Registrant information

##### Name

Hamna Afzal

##### Name of organization / entity

Riphah International University

##### Country

Pakistan

##### Phone

+92 48 3768660

##### Email address

hamnaafzal101@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-10-20, 1399/07/29

##### Expected recruitment end date

2020-11-30, 1399/09/10

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

**Trial completion date**

empty

**Scientific title**

Effects of Kendall exercise versus Gong's mobilization on pain, range of motion, function and strength in text neck syndrome.

**Public title**

Effects of Kendall exercise versus Gong's mobilization on pain, range of motion, function and strength in text neck syndrome.

**Purpose**

Treatment

**Inclusion/Exclusion criteria****Inclusion criteria:**

Young adults (male & female, 18-35 years age), more than one year using a smartphone, Using smart phone for more than 2 hours a day Craniovertebral angle(CVA)less than 50° and rounded shoulder angle (RSA) greater than 52° Score of more than 5 on NPRS and more than 10 on NDI Having neck pain which is increased by sustained posture and feeling of stiffness on turning the head and neck after long usages.

**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: **24**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Written informed consent will be taken. After enrollment into study, patient will be allocated either to group A or Group B by lottery method. No. of Chits will be equal to total sample size, odd Numbers will be allocated to Group A and even number will be allocated to Group B. Each patient will be requested to draw a chit from the box and after that patient will be recruited into either Group A or Group B

**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**

Riphah International University

**Street address**

28-M Quaid-e-Azam Industrial Estate, Kot Lakhpat, Lahore

**City**

Lahore

**Postal code**

54000

**Approval date**

2020-12-29, 1399/10/09

**Ethics committee reference number**

REC/RCR & AHS/20/0105

**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****ICD-10 code description****Primary outcomes****1****Description**

pain

**Timepoint**

before treatment and after treatment (6th week)

**Method of measurement**

Numeric Pain Rating Scale (NPRS)

**2****Description**

Functional performance

**Timepoint**

before treatment and after treatment (6th week)

**Method of measurement**

Neck Disability Index (NDI)

**3****Description**

Cervical AROM

**Timepoint**

before treatment and after treatment (6th week)

**Method of measurement**

Universal Goniometer

**4**

**Description**

Strength

**Timepoint**

before treatment and after treatment (6th week)

**Method of measurement**

Sphygmomanometer

**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. Kendall exercise will be performed to Strengthen the deep cervical flexors and shoulder retractors and Stretching the cervical extensors and pectoralis muscle. Kendall exercise group will participate in 5 sets consisting of 12 repetitions of postures, each taking 30 seconds, 3 sessions per week on alternate days will be given.

**Category**

Treatment - Other

**2**

**Description**

Intervention group: After taking baseline measures, group B will be treated with hot pack for 7-10 min. The Gong's Mobilization group will receive concurrent application of apophyseal joint gliding and end range passive physiological movements while the patients' cervical postures will passively neutral in order to induce normal cervical extension. 10-15 repetition, 3 sessions per week on alternate days will be given for 6 weeks. Treatment time of each session will be approximately 20-30 minutes.

**Category**

Treatment - Other

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Fatima Hospital, University road Sargodha, Pakistan

**Full name of responsible person**

Hamna Afzal

**Street address**

University road, Sargodha.

**City**

Sargodha

**Postal code**

40100

**Phone**

+92 48 3768660

**Email**

hamnaafzal101@gmail.com

**Web page address**

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Fatima hospital, Sargodha

**Full name of responsible person**

Hamna Afzal

**Street address**

University road, Sargodha

**City**

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**Phone**

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**Email**

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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**

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**

Hamna Afzal

**Position**

student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**

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Sargodha

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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**

Hamna Afzal

**Position**

student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

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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**

Hamna Afzal

**Position**

student

**Latest degree**

Bachelor

**Other areas of specialty/work**

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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