Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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

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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

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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

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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
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Position
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Person responsible for updating data

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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