Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

COMPARISON OF ACTIVE RELEASE TECHNIQUE AND POST ISOMETRIC RELAXATION TECHNIQUE IN NON-SPECIFIC NECK PAIN

Protocol summary

Study aim
The aim of this study is to compare the effects of the active release technique and post isometric relaxation technique on non-specific neck pain

Design
parallel-group, double-blind, RCT

Settings and conduct
participants, health care providers, data collectors, outcome assessors, and with lesser importance data safety and monitoring board and manuscript writers. outcome assessor is not taken blind, Data safety will be ensured.

Participants/Inclusion and exclusion criteria
participants will be included: • Age range of 18 to 40 years • Both males and females • Trigger points • Presence of taut bands in skeletal muscles • Limitation of neck movement due to pain • A minimum of two hours a day of computer usage or persistent (bending posture) work routine • Minimum of four weeks of neck pain due to TrPs in the muscles. EXCLUSION CRITERIA • History of a whiplash injury, • Cervical spine surgery, • Cervical radiculopathy, as diagnosed by their primary care physicians • Cervical spine fracture • Malignancy • Infection • Inflammatory disorder

Intervention groups
Group A: Active release technique Group B: Post isometric relaxation technique

Main outcome variables
Pain and function

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20210305050581N1**
Registration date: **2021-04-15, 1400/01/26**
Registration timing: **prospective**
Last update: **2021-04-15, 1400/01/26**
Update count: **0**

Registration date
2021-04-15, 1400/01/26

Registrant information

Name
Taqdees Manzoor

Name of organization / entity
Riphah International University

Country
Pakistan

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+92 542 538127

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taqdeeskanwal13@gmail.com

Recruitment status
Not yet recruiting

Funding source

Expected recruitment start date
2642-03-25, 2021/01/05

Expected recruitment end date
2642-08-29, 2021/06/07

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
COMPARISON OF ACTIVE RELEASE TECHNIQUE AND POST ISOMETRIC RELAXATION TECHNIQUE IN NON-SPECIFIC NECK PAIN

Public title
COMPARISON OF ACTIVE RELEASE TECHNIQUE AND POST ISOMETRIC RELAXATION TECHNIQUE IN NON-SPECIFIC NECK PAIN

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

• Age range of 18 to 40 years • Both males and females • Trigger points • Presence of taut bands in skeletal muscles • Limitation of neck movement due to pain • A minimum of two hours a day of computer usage or persistent (bending posture) work routine • Minimum of four weeks of neck pain due to TrPs in the muscles.

Exclusion criteria:

• History of a whiplash injury, Cervical spine surgery • Cervical radiculopathy , as diagnosed by their primary care physicians • Cervical spine fracture • Malignancy • Infection • Inflammatory disorder

Age

From **18 years** old to **40 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant
- Care provider
- Data analyser

Sample size

Target sample size: **54**

Randomization (investigator's opinion)

Randomized

Randomization description

subjects will be randomly distributed (consecutive sampling) to two groups with the use of lottery method of randomization, group 1 patients will get ART, and group 2 will get post isometric relaxation technique, double-blind,

Blinding (investigator's opinion)

Double blinded

Blinding description

outcome assessor is not blind , the participant was blind, the therapist was blind, statistician was blind

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Riphah ethical committee

Street address

H # 86/29 St # 30 Sunny View Park

City

Lahore

Postal code

54810

Approval date

2020-03-27, 1399/01/08

Ethics committee reference number

REC/RCRS/20/1066

Health conditions studied

1

Description of health condition studied

non specific neck pain

ICD-10 code

M54.2

ICD-10 code description

Cervicalgia

Primary outcomes

1

Description

Pain

Timepoint

Before treatment and after 2 weeks after treatment

Method of measurement

Numeric pain rating scale(NPRS),

2

Description

Disability

Timepoint

Before treatment and after 2 weeks after treatment

Method of measurement

Neck disability index (NDI)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group1: active release technique, Both groups of patients received cervical isometrics, massage, and a hot pack for 10 minutes. Following that, both groups receive their respective treatments, i.e. Group A is given active release technique, in which the therapist examines and traps the MTrp of the affected muscle by applying pressure with his or her thumb or finger. After that, the patient was asked to actively shift from a reduced to an extended position. The therapist applied constant pressure and tension to the MTrps during this time.. While applying pressure to the ART patient, he or she was sitting or lying on the treatment table

Category

Treatment - Other

2

Description
Intervention group2: post isometric relaxation technique, Group B was given a post-isometric relaxation technique. To perform this technique,The hypertonic muscle is taken to the point where resistance to movement becomes apparent, or to a duration just short of discomfort. A submaximal (10-20%) contraction of the hypertonic muscle is performed away from the limit for 5 to 10 seconds, while the therapist applies resistance in the opposite direction. During this effort, the patient should inhale. Following the isometric contraction, the patient is instructed to relax while exhaling. Following that, a gentle stretch is used to take up the slack until the new barrier is reached. The procedure is repeated beginning with this new barrier. Patients were evaluated prior to the first session and two weeks later using outcome measuring tools such as the NDI and the numeric pain rating scale to assess function and pain.Patients received two treatment sessions per week and were reassessed after the second week of treatment. Subjects did 7–10 repetitions of exercises three times a day, depending on pain intensity. The preliminary evaluation and treatment lasted one hour, and the subsequent treatments lasted 30–45 minutes. The subjects were given a maximum of four treatments over the course of two weeks.

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
green health clinic lahore

Full name of responsible person
Dr. Taqdees Manzoor

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Sponsors / Funding sources

1

Sponsor

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
Yes

Title of funding source
Riphah international university

Proportion provided by this source
20

Public or private sector
Private

Domestic or foreign origin
Foreign

Category of foreign source of funding
Sponsor: country of origin

Country of origin
PK

Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact

Name of organization / entity
Riphah international university

Full name of responsible person
Dr. Taqdees Manzoor

Position
student

Latest degree
Bachelor

Other areas of specialty/work
Physiotherapy

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Person responsible for scientific inquiries

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available
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