

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Effectiveness of Acupressure with Stretching and Acupressure Technique alone in Patients with Perceived Stress Related Sub-Acute Neck Pain

Protocol summary

Study aim

To evaluate the effects of neck acupressure with and without stretching on perceived stress related sub-acute neck pain and to evaluate the effects of neck acupressure on disability, perceived stress and range of motion of the neck.

Design

Single blinded, parallel assigned, multi-centred, randomised clinical trial, quantitative study, sample size 48 (2 groups each with 24 participants) with perceived stress related sub-acute neck pain assessed by pain and stress, Simple random sampling technique

Settings and conduct

This study was conducted at physiotherapy department of Chatha Hospital Jaranwala. The study was completed in 4 months that included collection and analysis of data. Participants were kept anonymous or conducted in single blind trial

Participants/Inclusion and exclusion criteria

Included participants: Middle aged male and female participants, moderate score perceived stress scale score (14 or greater), with neck pain history of >30 days, complain of neck pain > 30mm on VAS, non-radiating neck pain and not undergoing psychiatry treatment. Excluded Participants: with any diagnosed musculoskeletal disorder, Pregnant females, or participants suffering from cancer, undergone surgery in past 3 months, with neck pain history of chronic, HIV disorders, swelling, skin issues, high blood pressure, any wound or contagious disease at the acupressure points, any neurological disorder, any vascular disorders and any infectious disease were excluded from study.

Intervention groups

participants were enrolled into 2 equal treatment groups, Group A (acupressure with stretching group) and Group B (acupressure alone group). Both groups with neck isometrics as baseline treatment

Main outcome variables

Primary Outcome Measure The cervical pain was

assessed by VAS Secondary Outcome Measure The cervical disability was measured by using the Neck Disability index and the range of motion was measured by goniometer

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20210806052089N1**

Registration date: **2021-09-07, 1400/06/16**

Registration timing: **registered_while_recruiting**

Last update: **2021-09-07, 1400/06/16**

Update count: **0**

Registration date

2021-09-07, 1400/06/16

Registrant information

Name

Fatima Naseem Bhatti

Name of organization / entity

The university of Faisalabad

Country

Pakistan

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fatimabhatti1765@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-06-11, 1400/03/21

Expected recruitment end date

2021-12-22, 1400/10/01

Actual recruitment start date

empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Effectiveness of Acupressure with Stretching and Acupressure Technique alone in Patients with Perceived Stress Related Sub-Acute Neck Pain

Public title
Effectiveness of acupressure in patients with perceived stress related sub-acute neck pain.

Purpose
Health service research

Inclusion/Exclusion criteria
Inclusion criteria:
Middle aged male and female participants between minimum age of 30 and maximum of 50 years
Effectiveness of Acupressure with Stretching and Acupressure Technique alone in Patients with Perceived Stress Related Sub-Acute Neck Pain moderate score
perceived stress scale score (14 or greater) Willing to participate by signing the consent form With neck pain history of >30 days (sub-acute) Complain of neck pain > 30mm on VAS, (moderate) Non-radiating neck pain Not undergoing psychiatry treatment or psychotropic medication were included into study
Exclusion criteria:
Participants with any diagnosed musculoskeletal disorder (spondylolisthesis, spondylitis, Rheumatoid arthritis etc.) Pregnant females, Participants suffering from cancer, Undergone surgery in past 3 months With neck pain history of >90 days (chronic) HIV disorders, swelling, skin issues High blood pressure Any wound or contagious disease at the acupressure points Any neurological disorder (Parkinson's, dementia, stroke etc.) Any vascular disorders (phlebitis, vertebral or carotid artery disorders, atherosclerosis etc.) Any infectious disease (T.B, Hepatitis etc.) were excluded from study

Age
From **30 years** old to **50 years** old

Gender
Both

Phase
3

Groups that have been masked

- Participant

Sample size
Target sample size: **48**

Randomization (investigator's opinion)
Randomized

Randomization description
Simple random sampling technique (probability sampling) where each participant has equal chance of getting enrolled into the study, was used for the sampling and after which the participants were enrolled into 2 equal treatment groups, Group A (acupressure with stretching group) and Group B (acupressure alone group) by lottery method where the selection of

participants into groups depends upon the card drawn and the specific number assigned to participants.

Blinding (investigator's opinion)
Single blinded

Blinding description
Participants will be aware of the description of treatments being performed in both groups but will not be aware which treatment will be performed on them. The participants of both groups will not be aware of the study groups. All the participants will be masked in the study. This will be carried out by keeping the anonymous by study period.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics and technical committee of university of Faisalabad

Street address

The university of Faisalabad, university town, Sargodha road ,Faisalabad

City

Faisalabad

Postal code

38000

Approval date

2021-05-21, 1400/02/31

Ethics committee reference number

TUF/DR/SA/MSPP/2021/213-230

2

Ethics committee

Name of ethics committee

Ethics and technical committee of university of Faisalabad

Street address

The university of Faisalabad, university town, Sargodha road ,Faisalabad

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Health conditions studied

1

Description of health condition studied

neck pain

ICD-10 code

M54.2

ICD-10 code description

Cervicalgia

Primary outcomes

1

Description

Visual Analogous Scale

Timepoint

Baseline, after 2weeks(6th session), after 4weeks(12th session)

Method of measurement

This involves pain range from no pain to max unbearable pain. Here, the VAS is considered as a horizontal line that measures 100mm in length. The patient marks the line at the point they think the severity of their perception of pain can represent.

Secondary outcomes

1

Description

Neck Disability Index

Timepoint

Baseline and after 4th week (12th session)

Method of measurement

Neck disability index (NDI) is a questionnaire used to assess the disability caused by the neck pain in everyday life. It involves 10 questions related to the activities of daily livings, that gives 6 possible options and point ranging 0-5, the least one is marked gives 0 score and last option being marked gives the 5 points, total points are 50 and the scoring is done by, dividing the patient score by 50 and multiplying by 100 gives a score in percent. If certain question (e.g. x) is missed because the patient doesn't do it, then total score will be divided by (50-x) points. The interpretation of NDI is given as: 0-4points (0-8%) no disability, 5-14points (10 - 28%) mild disability, 15-24points (30-48%) moderate disability, 25-34points (50- 64%) severe disability, 35-50points (70-100%) complete disability

2

Description

Perceived stress scale

Timepoint

Baseline and after 4th week (12th session)

Method of measurement

The perceived stress scale (PSS) is most commonly used psychometric scale for the measurement of perception of stress. This is simple questionnaire with simple and

related to nature questions. It describes the feeling of patient regarding certain aspects in last month. The scores of PSS are obtained by simply reversing the patient's responses of positive sensed questions "4, 5, 7 and 8". i.e. (0=4, 1=3, 2=2, 3=2, 4=0) and then summing up all responses. The score can range from 0-40 where the higher scores represent higher level of stress by patient. The scoring is interpreted as: 0-13= low perceived stress, 14-26= moderate perceived stress and 27-40= high perceived stress.

3

Description

Cervical range of motion

Timepoint

Baseline and after 4th week (12th session)

Method of measurement

The cervical ranges of motion (flexion, extension, side bending and rotation) was measured by using Goniometer.

Intervention groups

1

Description

Intervention group: Group A (acupressure with stretching). The group received warm-up session of hot-pack and neck isometric exercises with 10s hold at 20% of the isometric strength repeated for 8 repetitions in all 4 directions. Participants in group A received acupressure at 21 acupressure points. Each of the acupoint was pressed for 10 seconds and repeated for 5 times. This acupressure treatment took almost 20 minutes of session and then group A participants received addition of stretching. Stretching techniques were performed in such order: towards lateral flexion (upper part of trapezius), ipsilateral flexion and rotation (scalene) and towards flexion (extensor muscles) each for 30 sec and repeated 2-3 times. This complete session took 30 minutes total.

Category

Treatment - Other

2

Description

Intervention group: Group B (Acupressure alone group). The participants of group B received warm-up of hot-pack and isometric exercise and then the acupressure therapy on all points for treatment time of 20 minutes only was performed.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Chatha Hospital Jaranwala
Full name of responsible person
Dr.Hareem Aslam
Street address
Main road ,Faisalabad road
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Jaranwala
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38000
Phone
+92 41 4711058
Email
Zayina.pearl.zp@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Yasmin physiotherapy centre
Full name of responsible person
Osama Ramzan
Street address
Sargodha road, near muslim town3 opposite KIA
motors
City
Faisalabad
Postal code
38000
Phone
+92 41 8785675
Email
Osamaramzan@gmail.com
Web page address
Http://omiphysio.com

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Yasmin physiotherapy centre

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
The university of Faisalabad
Full name of responsible person
Fatima Naseem Bhatti

Position
Student
Latest degree
Master
Other areas of specialty/work
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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)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

As we have signed and assured the participants that
there data will not be shared anywhere else other than
this study

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

Effectiveness of Acupressure with Stretching and
Acupressure Technique alone in Patients with Perceived
Stress Related Sub-Acute Neck Pain Everything related to
the trial would be provided study protocol, primary and
secondary outcome measure data will be shared no
further details regarding personal information of the
patient will be shared.

**When the data will become available and for how
long**

Starting from January 2022

To whom data/document is available

Anyone relevant to the medical field can apply for it

Under which criteria data/document could be used

Medical students , researchers and anyother healthcare
related person can ask for it

From where data/document is obtainable

By Email

**What processes are involved for a request to access
data/document**

An Email stating the use of data will be appreciated

Comments