Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 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 ExcludedParticipants: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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+92 41 4312868

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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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Approval date

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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 descripts 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 4 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
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Latest degree
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Other areas of specialty/work
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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