# Clinical Trial Protocol
# Iranian Registry of Clinical Trials

27 Jul 2026

## Effects of integrated neuromuscular inhibition technique on upper trapezius trigger points in patients with non specific neck pain: a randomized controlled trail

## Protocol summary

**Study aim**
To check effect of integrated neuromuscular inhibition technique on upper trapezius trigger points in patients with non-specific neck pain

**Design**
Two arm parallel Randomized, single blinded, pre and post treatment outcome assessment

**Settings and conduct**
It will be a signle blinded randomized controlled trial and outcomes assessor will be unaware of the treatment given to patients and it will be carried out at the jacobabad Institute of Medical Science Jacobabad, sindh.

**Participants/Inclusion and exclusion criteria**
Inclusion Criteria: (1)Subjects suffering from non-specific neck pain. (2) Subjects will be required to have neck pain of less than 3 months duration as well as active TrPs in the upper trapezius muscle. Exclusion Criteria: (1)Patients with neck symptoms related to a motor vehicle collision or significant trauma (2)patients with signs of serious pathology (e.g. malignancy, infection, inflammatory disorder, or fracture) (3)Patients with signs of cervical spinal cord compromise (e.g. diffuse sensory abnormality, diffuse weakness, hyperreflexia, or the presence of clonus), two or more signs of nerve root involvement (e.g. dermatomal sensation changes, myotomal weakness) (4) History of neck surgery during the previous 12 months, and a history of cervical degenerative joint disease, endocrine disorders, and autoimmune conditions (e.g. rheumatoid arthritis, fibromyalgia, etc.) (5) Patients who had received trigger point injections in the upper trapezius muscle within the past 6 months

**Intervention groups**
It will be a randomized controlled trial in which people will be randomly allocated into either control or intervention group. Control group will receive Routine physical therapy while Experimental Group will receive integrated Neuromuscular inhibition Technique along with routine physical therapy

**Main outcome variables**
Pain, functional disability

## General information

**Reason for update**

**Acronym**
Randomized controlled trial

**IRCT registration information**
IRCT registration number: **IRCT20220104053617N1**
Registration date: **2022-03-23, 1401/01/03**
Registration timing: **registered_while_recruiting**

Last update: **2022-03-23, 1401/01/03**
Update count: **0**

**Registration date**
2022-03-23, 1401/01/03

**Registrant information**

**Name**
Nargis Jamali
**Name of organization / entity**
University of Lahore
**Country**
Pakistan
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**Recruitment status**
**Recruitment complete**

**Funding source**

**Expected recruitment start date**
2021-12-24, 1400/10/03

**Expected recruitment end date**

2022-05-10, 1401/02/20

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

Effects of integrated neuromuscular inhibition technique on upper trapezius trigger points in patients with non specific neck pain: a randomized controlled trail

**Public title**

Effects of integrated neuromuscular inhibition technique on upper trapezius trigger points in patients with non specific neck pain

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Subjects suffering from non-specific neck pain, defined as non-articular or non-systemic as per the referring physician. Subjects will be required to have neck pain of less than 3 months duration as well as active TrPs inthe upper trapezius muscle, defined as a tender nodule in a taut band that referred pain beyondthe area of contact

**Exclusion criteria:**

If patiant with neck symptoms will be related to a motor vehicle collision or significant trauma, they will not be included in our study If patiants will be presenting with signs of serious pathology (e.g. malignancy, infection, inflammatorydisorder, or fracture), then he/she will not be included in the trial Patients with signs of cervical spinal cord compromise (e.g. diffuse sensory abnormality, diffuse weakness, hyperreflexia, or the presence of clonus), two or more signs of nerve rootinvolvement (e.g. dermatomal sensation changes, myotomal weakness, or diminished/absenttendon jerk reflexes) A history of neck surgery during the previous 12 months, and a history of cervical degenerativejoint disease as per radiographs, endocrine disorders, and autoimmune conditions (e.g. rheumatoid arthritis, fibromyalgia, etc.) If pateints had received trigger point injections in the upper trapezius muscle within the past 6 months, they will not be included in our study

**Age**

From **18 years** old to **55 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

- Outcome assessor

**Sample size**

Target sample size: **48**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Sample size was collected and it turned out to be 48. Subjects meeting the inclusion criteria will be randomly allocated into two groups using computer generated randomization method in which computer software will be utilized to allocate 24 subjects in each group. Purposive Random Sampling will be carried out for this purpose. Allocation concealment will be Carried out.

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

Our study will be single blinded. Outcome assessor will be unaware of the treatment given to patient.. He will not be given any information on which treatment is applied on which patient.

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**

**Name of ethics committee**

Ethics committee of University of Lahore

**Street address**

1km.off defence road, Lahore

**City**

Lahore

**Postal code**

537000

**Approval date**

2021-12-23, 1400/10/02

**Ethics committee reference number**

REC-UOL-/52-02/2022

## Health conditions studied

### 1

**Description of health condition studied**

Non specific neck pain

**ICD-10 code**

M54.02

**ICD-10 code description**

Panniculitis affecting regions of neck and back, cervical region

## Primary outcomes

### 1

**Description**

Pain

**Timepoint**

Pain will be assessed at Baseline and after every week for 4 weeks

**Method of measurement**

Visual Analog Scale will be utilized for the assessment of pain

**2**

**Description**
Functional disability
**Timepoint**
Functional Disability will be assessed at Baseline and after every week for 4 weeks
**Method of measurement**
Neck Disability Index will be utilized for this purpose

## Secondary outcomes

empty

## Intervention groups

**1**

**Description**
Control group:this group will receive training in 30-minute sessions, 5times per week, for 8 weeks. Total duration of treatment in this group will be 30 minutes. Thirty minutes for conventional treatment like low level of the heating at the neck for 5-10 minutes.(2)Posture corrective exercises , alignment and neck-strengthening exercises, Transcutaneous electrical nerve stimulation (TENS). Traction. Short-term immobilization at cervical. Acupuncture. Chiropractic massage.
**Category**
Treatment - Other

**2**

**Description**
Intervention group:- In a intervention group Patients will receive conventional physical therapy in 30-minute sessions, 5 times per week, for 8 weeks.that will include low level of the heating at the neck for 5-10 minutes.(2)Posture corrective exercises , alignment and neck-strengthening exercises, Transcutaneous electrical nerve stimulation (TENS). Traction. Short-term immobilization. Acupuncture. Chiropractic Massage. 2-Along with Conventional Treatment Protocol there will be additional treatment Technique integrated Neuromuscular inhibitionTechnique must be applied to get better outcomes , the duration of thistechnique will be 20-30 minutes data Collection Tools (Proforma/Questionnaire) thirty minutes of integrated neuromuscular inhibition technique.
**Category**
Treatment - Other

## Recruitment centers

**1**

**Recruitment center**
**Name of recruitment center**
Jacobabad Institute of Medical Science, Jacobabad
**Full name of responsible person**
Ghalib Hussain
**Street address**
7FF2+694, channa mohalla, channa mohalla, Jacobabad, Sindh
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## Sponsors / Funding sources

**1**

**Sponsor**
**Name of organization / entity**
University of Lahore
**Full name of responsible person**
Dr. Asad Gillani
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1km.off defence road, Lahore
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537000
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asadshahgilani@gmail.com
**Grant name**
**Grant code / Reference number**
**Is the source of funding the same sponsor organization/entity?**
Yes
**Title of funding source**
University of Lahore
**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**
Academic

## Person responsible for general inquiries

**Contact**
**Name of organization / entity**
University of Lahore
**Full name of responsible person**
Nusrat Qamar
**Position**
Student
**Latest degree**
Bachelor
**Other areas of specialty/work**

Physiotherapy

**Street address**
1km.off defence road, Lahore

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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)**
Yes - There is a plan to make this available

**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**
EFFECTS OF INTEGRATED NEUROMUSCULAR INHIBITION TECHNIQUE ON UPPER TRAPEZIUS TRIGGER POINTS IN PATIENTS WITH NON SPECIFIC NECK PAIN: RANDOMIZED CONTROLLED TRIAL. All collected deidentified IPD

**When the data will become available and for how long**
Data will be available from December 2022 for three years.

**To whom data/document is available**
Data will be available for those working in academics or involved in clinical research work

**Under which criteria data/document could be used**
Data can be used for citation purposes

**From where data/document is obtainable**
Data will be made available through email. Applicants wanted to have access can email on following e mail address and it could take 3 working days to make data available for applicant. Ema Address: dr.nusratqamar55@gmail.com

**What processes are involved for a request to access data/document**
Data will be made available through email. Applicants wanted to have access can email on following e mail address and it could take 3 working days to make data available for applicant. Ema Address: dr.nusratqamar55@gmail.com

**Comments**