

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Assessment of work related trigger points in neck and shoulder muscle in office workers and comparison of dry needling and ischemic compression in treatment of trigger points

Protocol summary

Summary

Objectives: Assessment and treatment of neck myofascial trigger points in female office workers that they work with computers at least for 3 hours in day. Design: Office workers of Tehran University of Medical Sciences participate in this study. 90 patients in 3 groups (ischemic compression, dry needling and control group) participate in one blinded phase 2, Randomized Clinical Trial. Setting and conduct: After referral of the subjects to In patient Rehabilitation Clinic, assessment will be done. If the subjects have trigger points, they will be assigned in 3 groups by randomly. Participants is the staff of Tehran University of Medical Sciences Inclusion & exclusion Criteria: People who experience neck pain at least once in the last week and at least 20 days during the past year; grade 2 in NRS at least ; and People with a history of trauma or surgery in the neck and shoulders are excluded. Intervention: The subjects in 3 groups get ischemic compression and exercise therapy, or dry needling and exercise therapy or only in control group receive exercise therapy Main Outcome Measures: Pain, Range of Motion and muscle strength.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201612071719N4**
Registration date: **2017-05-05, 1396/02/15**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-05-05, 1396/02/15

Registrant information

Name

khadije Otadi

Name of organization / entity

Tehran University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research Tehran University of Medical Science

Expected recruitment start date

2017-01-29, 1395/11/10

Expected recruitment end date

2018-01-30, 1396/11/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Assessment of work related trigger points in neck and shoulder muscle in office workers and comparison of dry needling and ischemic compression in treatment of trigger points

Public title

The effect of physiotherapy on neck pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: People who experience neck pain at

least once in the last week ; People Have neck pain at least 20 days during the past year; Have grade 2 in NRS at least ; Exclusion criteria:People with a history of trauma or surgery in the neck and shoulders are excluded.

Age

From **18 years** old to **50 years** old

Gender

Female

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **90**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Single blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Tehran University of Medical Sciences

Street address

Tehran University of Medical Science. Enghlab Square, Tehran

City

Tehran

Postal code**Approval date**

2016-11-20, 1395/08/30

Ethics committee reference number

IR.TUMS.FNM.REC.1395.797

Health conditions studied**1****Description of health condition studied**

Neck pain

ICD-10 code

M60, M61,

ICD-10 code description

Muscle disorders

Primary outcomes**1****Description**

Pain

Timepoint

Before and after treatment

Method of measurement

Visual analogue scale

2**Description**

Muscle strength

Timepoint

Before and after treatment

Method of measurement

By manual dynamometer

3**Description**

Range of motion

Timepoint

Before and after treatment

Method of measurement

By goniometer

4**Description**

Neck disability index

Timepoint

Before and after treatment

Method of measurement

NDI questionnaire

Secondary outcomes

empty

Intervention groups**1****Description**

"Intervention group : Dry Needling & Exercise Therapy"

Category

Rehabilitation

2**Description**

" Control group: Exercise Therapy"

Category

Rehabilitation

3**Description**

" Intervention group: Ischemic Compression & Exercise therapy"

Category

Rehabilitation

Recruitment centers**1****Recruitment center****Name of recruitment center**

Tehran University of Medical Science, Faculty of Rehabilitation, Physiotherapy Clinic

Full name of responsible person

Khadijeh Otadi

Street address

Pich.e.Shemiran, Enghelab, Tehran

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Vice chancellor for research, Tehran University of Medical Science

Full name of responsible person

Ms. Norooz zadeh

Street address

The Corner of Qoudes- Keshavarz Blu, Enghelab square

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Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Vice chancellor for research, Tehran University of Medical Science

Proportion provided by this source

100

Public or private sector*empty***Domestic or foreign origin***empty***Category of foreign source of funding***empty***Country of origin****Type of organization providing the funding***empty***Person responsible for general inquiries****Contact****Name of organization / entity**

Tehran university of Medical Science

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Web page address**Sharing plan****Deidentified Individual Participant Data Set (IPD)***empty***Study Protocol**

empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report

empty
Analytic Code
empty
Data Dictionary
empty