

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The comparison of dry needling and inhibitory Kinesio taping therapeutic effects in female patients with myofascial pain syndrome in upper trapezius muscle

#### Protocol summary

##### Study aim

The comparison of dry needling and inhibitory Kinesio taping therapeutic effects in female patients with myofascial pain syndrome in upper trapezius muscle

##### Design

Non-random (simple convenient method), without placebo control, single arm trial. The sample size of this study is 75 individuals: divided into 3 groups of 25 people.

##### Settings and conduct

Neuromuscular Rehabilitation Research Center Semnan University of Medical Sciences.

##### Participants/Inclusion and exclusion criteria

Women aged 20-40 years with upper myocardial infarction pain referring to Tabataba'i center in Semnan. Inclusion criteria: Having chronic pain that lasts at least 3 months from the start; the presence of the tight band in the muscle; having sensitive points in the upper trapezius muscle; recognizing pain. Exclusion criteria: Individuals with fibromyalgia; Individuals with facial nerve neuralgia, rheumatoid arthritis, rheumatic diseases, degenerative diseases, fractures, dislocation, inflammation, bursitis and arthritis; persons with neck and shoulder myopathy, neuropathy, myelopathy and cortical People with history of neck and shoulder surgery and other areas of the body; People with a history of injection in the trigger points of upper trapezius muscle or acupuncture; People with cancer, infection, pain and pathogenesis, acquired immunodeficiency virus; Athletes; people with substance abuse or taking corticosteroid drugs as well as pregnant women; those who have undergone continuous physiotherapy or exercise during the last two weeks; those who received dry needles in the last three months; taking sedative medications; Or alcohol one week prior to evaluation; people with mental and cognitive impairment and uncorrected vision impairment; people with acrylic skin

allergies.

##### Intervention groups

Control group: Only for comparison with intervention group, no treatment is performed. Intervention group 1: 25 patients will be treated with dry needles according to the protocol (sterile epoxy needles 0.3 mm in diameter and 5 cm in length). Each point will be treated for 2 minutes. Treatment is done every 72 hours for up to two weeks and the follow up is repeated after one week. Intervention group 2: 25 people are treated with an inhibitive movement tape according to the protocol (5 cm bandwidth). The muscle will be measured in its longitudinal position (the neck will bend to the opposite side and rotate to the same side). Treatment is done every 72 hours for up to two weeks and the follow up is repeated after one week.

##### Main outcome variables

Muscle thickness, Intensity of pain.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20151228025732N28**

Registration date: **2018-01-23, 1396/11/03**

Registration timing: **registered\_while\_recruiting**

Last update: **2018-01-23, 1396/11/03**

Update count: **0**

##### Registration date

2018-01-23, 1396/11/03

##### Registrant information

##### Name

Alireza Emadi

##### Name of organization / entity

Semnan University of Medical Sciences, Semnan, Iran

##### Country

Iran (Islamic Republic of)

**Phone**

+98 23 3345 1336

**Email address**

are20935@semums.ac.ir

**Recruitment status**

**Recruitment complete**

**Funding source**

**Expected recruitment start date**

2017-10-18, 1396/07/26

**Expected recruitment end date**

2018-10-17, 1397/07/25

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

The comparison of dry needling and inhibitory Kinesio taping therapeutic effects in female patients with myofascial pain syndrome in upper trapezius muscle

**Public title**

The comparison of dry needling and inhibitory Kinesio taping therapeutic effects in female patients with myofascial pain syndrome in upper trapezius muscle

**Purpose**

Treatment

**Inclusion/Exclusion criteria**

**Inclusion criteria:**

Women 20 to 40 years Having chronic pain that lasts at least 3 months from the start The presence of tight band in the muscle Having sensitive points in the upper trapezius muscle Recognizing pain

**Exclusion criteria:**

Individuals with fibromyalgia Individuals with Facial Nerve Neuralgia, Rheumatoid Arthritis, Rheumatic Diseases, Degenerative Diseases, Fractures, Dislocation, Inflammation, Bursitis and Arthritis Persons with Neck and Shoulder Myopathy, Neuropathy, Myelopathy and Cortical People with history of neck and shoulder surgery and other areas of the body People with a history of injection in the trigger points of upper trapezius muscle or acupuncture People with cancer, Infection, Pain and Pathogenesis, Acquired Immunodeficiency virus Athletes people with substance abuse or taking corticosteroid drugs as well as pregnant women Those who have undergone continuous physiotherapy or exercise during the last two weeks Those who received dry needles in the last three months Taking sedative medications or alcohol one week prior to evaluation People with mental and cognitive impairment and uncorrected vision impairment People with acrylic skin allergies

**Age**

From **20 years** old to **40 years** old

**Gender**

Female

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **75**

**Randomization (investigator's opinion)**

Not randomized

**Randomization description**

**Blinding (investigator's opinion)**

Not blinded

**Blinding description**

**Placebo**

Not used

**Assignment**

Factorial

**Other design features**

**Secondary Ids**

empty

**Ethics committees**

**1**

**Ethics committee**

**Name of ethics committee**

Ethics committee of Semnan University of Medical Sciences

**Street address**

Semnan University of Medical Sciences, Basij Blvd, Semnan

**City**

Semnan

**Province**

Semnan

**Postal code**

3514799442

**Approval date**

2017-10-18, 1396/07/26

**Ethics committee reference number**

IR.SEMUMS.REC.1396.109

**Health conditions studied**

**1**

**Description of health condition studied**

Myofascial pain syndrome in upper trapezius muscle

**ICD-10 code**

G71.8

**ICD-10 code description**

Other primary disorders of muscles

**Primary outcomes**

**1**

**Description**

Muscle thickness

**Timepoint**

Before and after the intervention

**Method of measurement**

Sonography

**2****Description**

Intensity of pain

**Timepoint**

Before and after the intervention

**Method of measurement**

Visual Analogue Scale (VAS)

**Secondary outcomes**

empty

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

Control group: Only for comparison with intervention group, no treatment is performed.

**Category**

Treatment - Other

**2****Description**

Intervention group 1: 25 patients will be treated with dry needles according to the protocol (sterile epoxy needles 0.3 mm in diameter and 5 cm in length). Each point will be treated for 2 minutes. Treatment is done every 72 hours for up to two weeks and the follow up is repeated after one week.

**Category**

Rehabilitation

**3****Description**

Intervention group 2: 25 people are treated with an inhibitive movement tape according to the protocol (5 cm bandwidth). The muscle will be measured in its longitudinal position (the neck will bend to the opposite side and rotate to the same side). Treatment is done every 72 hours for up to two weeks and the follow up is repeated after one week.

**Category**

Rehabilitation

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

Tabataba'i center

**Full name of responsible person**

Sirous Taghizadeh-Delkhosh

**Street address**

Tabataba'i center, Ghods Blvd

**City**

Semnan

**Province**

Semnan

**Postal code**

3514799442

**Phone**

+98 23 3345 1336

**Email**

are20935@gmail.com

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

Semnan University of Medical Sciences

**Full name of responsible person**

Mohammadreza Asgari

**Street address**Semnan University of Medical Sciences, Basij Blvd,  
Semnan**City**

Semnan

**Province**

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3514799442

**Phone**

+98 23 3345 1336

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asgari5000@gmail.com

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

Yes

**Title of funding source**

Semnan University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

Public

**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**

Semnan University of Medical Sciences

**Full name of responsible person**

Sirous Taghizadeh-Delkhosh

**Position**

Associate professor

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physiotherapy

**Street address**

Tabataba'i center, Ghods Blvd

**City**

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**Province**

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**Postal code**

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**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Semnan University of Medical Sciences

**Full name of responsible person**

Sirous Taghizadeh-Delkhosh

**Position**

Associate professor

**Latest degree**

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**Other areas of specialty/work**

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**Person responsible for updating data****Contact****Name of organization / entity**

Semnan University of Medical Sciences

**Full name of responsible person**

Soghra Bakhshi

**Position**

Students

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

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**Province**

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**Postal code**

3514799442

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**Email**

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**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not a plan to make this available

**Informed Consent Form**

No - There is not a plan to make this available

**Clinical Study Report**

No - There is not a plan to make this available

**Analytic Code**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available

**Title and more details about the data/document**

-

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

-

**To whom data/document is available**

Only available to scholars working in academic institutions.

**Under which criteria data/document could be used**

In case of relevant studies.

**From where data/document is obtainable**

Sirous Taghizadeh-Delkhosh. Tabataba'i center, Ghods Blvd, Semnan. 00989123311988

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

-

**Comments**