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

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Alireza Emadi

Name of organization / entity
Semnan University of Medical Sciences, Semnan, Iran

Country

Iran (Islamic Republic of)

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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
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Semnan University of Medical Sciences
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Mohammadreza Asgari
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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
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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