Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Evaluating and Comparing Facilitation vs. Inhibition Kinesiology Taping Techniques on Pain and Electromyography Activity of the Upper Trapezius with Myofascial Trigger Points in Forward Head Posture

Protocol summary

Study aim

1- Determining and comparing the levels of pain, disability, and changes in neck range of motion after applying kinesiotape (KT) with a facilitative and inhibitory method compared to a placebo group in individuals with Forward Head Posture (FHP)." 4- Determining and comparing CVA, CHA, and EAD after applying KT with facilitative and inhibitory methods compared to the placebo group in individuals with FHP. 5- Determining and comparing the electromyographic activity of neck muscles in static conditions and during functional activity after applying KT.

Design

This clinical trial is designed with a placebo control group, parallel groups, is single-blind, and randomized. To randomize the participants, sealed envelopes and a block randomization method were used.

Settings and conduct

After the initial assessment in the laboratory, patients will undergo 4 sessions of treatment with kinesiotape. The colleague responsible for recording the data is blinded.

Participants/Inclusion and exclusion criteria

Inclusion criteria: - Males and females aged 20 to 40 years - CVA size in the range of 43-48 (Moderate FHP) - Presence of trigger points in the upper trapezius muscle - VAS score in the range of 4 to 7 Exclusion criteria: - Fracture or trauma and Musculoskeletal surgery on the neck and shoulder area - Severe deformities - sensitivity and Allergy to KT taping - Recent neck treatment - Individuals using any muscle relaxants or sedatives.

Intervention groups

One of the groups receives facilitative kinesiotaping on the upper trapezius muscle, the other group receives inhibitory kinesiotaping on the upper trapezius muscle. The placebo group receives tape without tension on the neck.

Main outcome variables

Improving the Condition of Patients with Neck Pain: A Clinical Guideline for Colleagues on the Use of Kinesiotape.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20260413069064N1**
Registration date: **2026-09-13, 1405/06/22**
Registration timing: **registered_while_recruiting**

Last update: **2026-09-13, 1405/06/22**
Update count: **0**

Registration date

2026-09-13, 1405/06/22

Registrant information

Name
Soodeh Rafieyan
Name of organization / entity
Tarbiat Modares University
Country
Iran (Islamic Republic of)
Phone
+98 31 3567 9828
Email address
s.rafieyan@modares.ac.ir

Recruitment status

recruiting

Funding source

Expected recruitment start date

2026-06-23, 1405/04/02

Expected recruitment end date

2027-01-24, 1405/11/04

Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Evaluating and Comparing Facilitation vs. Inhibition Kinesiology Taping Techniques on Pain and Electromyography Activity of the Upper Trapezius with Myofascial Trigger Points in Forward Head Posture

Public title
Evaluating and Comparing Facilitation vs. Inhibition Kinesiology Taping Techniques on Pain and Electromyography Activity of the Upper Trapezius with Myofascial Trigger Points in Forward Head Posture
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
- Males and females aged 20 to 40 years CVA size in the range of 43-48 (Moderate FHP) Presence of trigger points in the upper trapezius muscle based on Travell & Simons criteria VAS score in the range of 4 to 7
Exclusion criteria:
Fracture or trauma to the cervical spine Musculoskeletal surgery on the neck and shoulder area Scoliosis Severe thoracic kyphosis Severe deformities such as torticollis Skin sensitivity Allergy to KT taping Recent neck treatment Neck surgery Individuals using any muscle relaxants or sedatives.
Age
From **20 years** old to **40 years** old
Gender
Both

Phase
N/A
Groups that have been masked

- Participant
- Outcome assessor

Sample size
Target sample size: **68**
Randomization (investigator's opinion)
Randomized
Randomization description
Participants will be stratified by sex (male and female) to ensure balanced representation across groups. Within each sex stratum, a blocked randomization with randomly varying block sizes of 3 will be used to assign participants equally to one of three taping conditions: facilitation, inhibition, or placebo.
Blinding (investigator's opinion)
Double blinded
Blinding description
Participants are aware of the existence of different groups in the study, but they are not informed about which group they will be assigned to. The data entry staff member is not aware of the groups.
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Tarbiat Modares university
Street address
Jalal Al-e Ahmad St., Tarbiat Modares University, Tehran
City
Tehran
Province
Tehran
Postal code
14117113116
Approval date
2026-07-18, 1405/04/27
Ethics committee reference number
IR.MODARES.REC.1405.083

Health conditions studied

1

Description of health condition studied
Forward head posture
ICD-10 code
R29.3
ICD-10 code description
Abnormal posture

Primary outcomes

1

Description
Electromyographic activity of the Upper Trapezius muscle."
Timepoint
At the beginning of the study and two days after the completion of four treatment sessions.
Method of measurement
Surface Electromyography (Aktos Myon) device

2

Description
Pain
Timepoint
At the beginning of the study and two days after the completion of four treatment sessions.
Method of measurement

Visual Analogue Scale questionnaire

Secondary outcomes

1

Description
Craniocervical Angle Measurement for the Assessment of Forward Head Posture
Timepoint
Before and 2 days following four treatment sessions.
Method of measurement
Kinovea Software

2

Description
Cervical Range of Motion (CROM)
Timepoint
Before and 2 days following four treatment sessions
Method of measurement
PhysioMaster Softwar

3

Description
Craniohorizontal angle
Timepoint
Before and 2 days following four treatment sessions
Method of measurement
Kinovea Software

4

Description
Neck Disability
Timepoint
Before and 2 days following four treatment sessions
Method of measurement
Neck Disability Index (NDI) Questionnaire

5

Description
Ear Tragus-to-Acromion Distance
Timepoint
Before and 2 days following four treatment sessions
Method of measurement
Kinovea Software

Intervention groups

1

Description
Intervention group 1: Facilitatory Kinsiologytape on Upper Trapezius muscle
Category
Treatment - Other

2

Description
Intervention group 2: Inhibitory Kinsologytape on Upper Trapezius muscle
Category
Treatment - Other

3

Description
Control group: Placebo Kinsiologytape on Cervical Spine
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Research and Treatment Center for Movement Disorders, Tarbiat Modares University
Full name of responsible person
Soodeh Rafieyan Esfahani
Street address
Southern Entrance, Movement Disorders Research and Treatment Center, Physiotherapy Department, Tarbiat Modares University, Gisha Bridge, Jalal Al-e Ahmad St., Tehran
City
Tehran
Province
Tehran
Postal code
1411713116
Phone
+98 21 8288 5052
Email
S.rafieyan@modares.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Deputy of Research and Technology, Tarbiat Modares University
Full name of responsible person
Dr.Roya Ravanbod
Street address
Tarbiat Modares University, Jalaal Al-Ahmad Highway, Tehran
City
Tehran
Province
Tehran
Postal code
1411713116
Phone
+98 912 240 6624

Fax
+98 21 8288 4555
Email
Ravanbod@modares.ac.ir
Web page address
https://med.modares.ac.ir/
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Deputy of Research and Technology, Tarbiat Modares University
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
Tarbiat Modares University
Full name of responsible person
Soodeh Rafieyan
Position
Physical Therapy Student
Latest degree
Bachelor
Other areas of specialty/work
Physiotherapy
Street address
Department of Physiotherapy, School of Medical Sciences, Tarbiat Modares University, Gisha Bridge, Jalal Al-e Ahmad St., Tehran
City
Tehran
Province
Tehran
Postal code
1411713116
Phone
+98 21 8288 3819
Fax
Email
S.rafieyan@modares.ac.ir

Person responsible for scientific inquiries

Contact
Name of organization / entity
Tarbiat Modares University
Full name of responsible person
Soodeh Rafieyan
Position
Physical Therapy Student
Latest degree
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Physiotherapy
Street address
Department of Physiotherapy, School of Medical Sciences, Tarbiat Modares University, Gisha Bridge, Jalal Al-e Ahmad St., Tehran
City
Tehran
Province
Tehran
Postal code
1411713116
Phone
+98 21 8288 3819
Fax
Email
S.rafieyan@modares.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Tarbiat Modares University
Full name of responsible person
Soodeh Rafieyan
Position
Physical Therapy Student
Latest degree
Bachelor
Other areas of specialty/work
Physiotherapy
Street address
Department of Physiotherapy, School of Medical Sciences, Tarbiat Modares University, Gisha Bridge, Jalal Al-e Ahmad St., Tehran
City
Tehran
Province
Tehran
Postal code
1411713116
Phone
+98 21 8288 3819
Fax
Email
S.rafieyan@modares.ac.ir

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

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Not applicable

Title and more details about the data/document

فقط بخشی ازداده نظیر اطلاعات مربوط به پیامد اصلی یا امثال آن امکان اشتراک گذاری دارد

When the data will become available and for how long

After publishing dervided articles

To whom data/document is available

Data will be made available upon reasonable request of the academic researchers, subject to review by the Research Committee of the Faculty of Medical Sciences of Tarbiat Modares University and the university's data use policies.

Under which criteria data/document could be used

Academic researches

From where data/document is obtainable

Roya Ravanbod

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

Review by the Research Committee of the Faculty of Medical Sciences of Tarbiat Modares University and the university's data use policies.

Comments