Clinical Trial Protocol
Iranian Registry of Clinical Trials

10 Jun 2026

The effects of upper trapezius muscle kinesiotype combined with Swedish massage on neck pain disability index, neck range of motion, quality of life, deep neck muscle function index and forward head angle in women with chronic neck pain

Protocol summary

Study aim

The aim of this study is to determine the effect of upper trapezius muscle kinesiology taping combined with Swedish massage on the Neck Pain Disability Index, Neck Range of Motion, Quality of Life, Deep Neck Muscle Function Index, and Forward Head Angle in women with chronic neck pain.

Design

This study is a randomized controlled trial (RCT) with parallel groups. Participants will be randomly assigned to two groups using Excel software (RAND function): intervention group (kinesiotaping and Swedish massage) and control group (usual care or placebo). The sample size is set at 100 patients and the study will be conducted in phase 2.

Settings and conduct

This study was a randomized clinical trial conducted in the laboratory of the Faculty of Sport Sciences at Razi University, in a controlled environment using advanced equipment. Participants were randomly assigned to intervention and control groups. The intervention group received a combination of upper trapezius kinesiotaping and Swedish massage for eight weeks. Data were collected before and after the intervention using the Neck Disability Index (NDI), goniometer, and SF-36 questionnaire.

Participants/Inclusion and exclusion criteria

Participant inclusion criteria included: Having chronic neck pain for at least 3 months. Age between 20 and 50 years. Not receiving physical or drug treatments affecting the neck in the past 6 weeks. Participant exclusion criteria included: History of surgery or serious injury to the neck. Having advanced neuromuscular or inflammatory diseases.

Intervention groups

Intervention groups: 1. Kinesiotaping + Swedish massage group: 2. Control group: - Receive usual care or sham intervention (if applicable) without kinesiotaping or Swedish massage.

Main outcome variables

Neck Pain Disability Index, Neck Range of Motion, Quality of Life, Deep Neck Muscle Performance Index, and Forward Head Angle

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20250222064801N1**
Registration date: **2025-06-02, 1404/03/12**
Registration timing: **retrospective**

Last update: **2025-06-02, 1404/03/12**
Update count: **0**

Registration date

2025-06-02, 1404/03/12

Registrant information

Name

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Name of organization / entity

The University Razi of Kermanshah

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date
2025-04-09, 1404/01/20
Expected recruitment end date
2025-05-10, 1404/02/20
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The effects of upper trapezius muscle kinesiotype combined with Swedish massage on neck pain disability index, neck range of motion, quality of life, deep neck muscle function index and forward head angle in women with chronic neck pain

Public title
The effect of kinesiotyping and Swedish massage on chronic neck pain, range of motion and quality of life in women
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
Having chronic neck pain for at least 3 months. Age between 20 and 50 years. Not receiving any physical or pharmacological treatments affecting the neck in the past 6
Exclusion criteria:
History of surgery or severe injury in the neck area. Presence of advanced neuromuscular or inflammatory diseases. Pregnancy or having movement limitations unrelated to neck pain.
Age
From **18 years** old to **40 years** old
Gender
Female

Phase
N/A
Groups that have been masked

- Participant

Sample size
Target sample size: **28**
Randomization (investigator's opinion)
Randomized
Randomization description
For randomization in this study, a variable-size block method was used: first, with statistical software (such as SPSS), random sequences were generated in blocks of different sizes (e.g., 4 or 6), in which in each block, an equal number of participants were assigned to the “intervention” (receiving FA and Swedish massage) and “control” groups. These sequences were then sealed in opaque, numbered envelopes. After registering each participant, the researcher opened the corresponding envelope and identified the individual’s group. This method increased the scientific validity of the study by ensuring a balance of groups (even in the event of sample withdrawal), preventing the researcher from predicting allocation (reducing bias), and conducting it independently of the evaluation team, following CONSORT standards.
Blinding (investigator's opinion)
Single blinded
Blinding description
Participants will be kept unaware of their group assignment (intervention or control) by designing the content and structure of the interventions in both groups to be as similar as possible in terms of appearance, timing, and method of implementation. These similarities are intended to minimize the likelihood of participants identifying their group assignment and to prevent bias arising from their expectations. This approach helps enhance the validity of the study results and reduces potential biases.
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Razi University of Kermanshah
Street address
No. 8, University Blvd, Kermanshah Province, Razi University
City
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Province
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Postal code
661489569
Approval date
2023-11-29, 1402/09/08
Ethics committee reference number
IR.RAZI.REC.1402.079

Health conditions studied

1

Description of health condition studied
Chronic Neck Pain
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Neck Pain Disability Index

Timepoint
Before the intervention and after the end of the study
Method of measurement
It is measured using the NDI questionnaire, which consists of 10 questions about pain intensity and functional limitations. Each question has a score between 0 and 5, and the total score is calculated between 0 and 50. A higher score indicates greater disability.

2

Description
Neck Range of Motion
Timepoint
Before the intervention and after the end of the study
Method of measurement
Using a goniometer or motion measurement devices (such as electronic systems or motion analysis software), the range of motion of the neck in different directions (forward bending, backward bending, left and right rotation, and lateral bending) is measured.

3

Description
Quality of Life
Timepoint
Before the intervention and after the end of the study
Method of measurement
It is measured using standard questionnaires such as the SF-36 (36-Item Short Form Health Survey) or WHOQOL-BREF. These questionnaires assess different dimensions of quality of life, including physical, mental, social, and environmental health.

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Kinesiotape plus Swedish massage. This group will receive a combination of two interventions: Kinesiotape: on the upper trapezius muscle to improve muscle function and reduce pain. Combined with Swedish massage to reduce muscle tension and improve blood circulation in the neck area. This combination is designed to increase the effectiveness of the treatment and improve symptoms faster.
Category
Prevention

2

Description
Control group: This group will receive Swedish massage only. Swedish massage is used alone to reduce pain, improve range of motion, and relax the neck muscles. The aim of this group is to examine the effect of Swedish massage alone, without the combination of Kinesiotape.
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Razi University of Kermanshah
Full name of responsible person
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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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
Razi University of Kermanshah
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
Razi University of Kermanshah
Full name of responsible person
Manouchehr Heydari
Position
Assistant Professor of Sports Pathology
Latest degree
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Other areas of specialty/work
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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
All data will be recorded in SPSS and can be presented.
When the data will become available and for how long
Access begins 9 months after the publication of all articles
To whom data/document is available
Only available to researchers working in academic and scientific institutions.
Under which criteria data/document could be used
All data can be used for citation.
From where data/document is obtainable
Maryam Hosseini Maryamhosseini1996@gmail.com
What processes are involved for a request to access data/document
The process of receiving documents or data files includes the steps of registering the request, reviewing and approving it, preparing the data, sending it, and following up. First, the requester completes the request form (15

to 30 minutes), then the request is reviewed by the study researchers and, if necessary, additional information is requested from the requester (1 to 3 business days). After approval, the data is prepared and its quality is checked (2 to 5 business days). The data is sent electronically or physically, with electronic sending taking place immediately and physical sending taking 2 to 7 business days. Finally, the study researchers respond to any questions within 1 to 2 business days. The overall time to receive data varies between 4 and 15 business days depending on the type of request and the method of submission.

Comments