Clinical Trial Protocol
Iranian Registry of Clinical Trials

19 Jun 2026

Comparison of the Effects of Kinesio Taping in Combination with Exercise Training with only Exercise Training on the Static and Dynamic Posture of Forward-head, Forward-shoulder Posture Swimmers with and without pain

Protocol summary

Study aim

Comparison of the Effects of Kinesio Taping in Combination with Exercise Training with only Exercise Training on the Static Posture of Forward-head, Forward-shoulder Posture Swimmers with and without pain Comparison of the Effects of Kinesio Taping in Combination with Exercise Training with only Exercise Training on the Dynamic Posture of Forward-head, Forward-shoulder Posture Swimmers with and without pain

Design

The present study is a phase 3 of randomized controlled trial parallel group with parallel groups. In this study 40 swimmers from 11 to 22 years of age with a FHP angle of 47 degrees and a FSP angle of 50 degrees that will be selected through screening in Shiraz pools. The participants are randomly assigned into two groups of Kinesio Taping combined with exercise training group and the exercise training group.

Settings and conduct

The research will be conducted in the Shiraz city and participants will be selected from the pools of this city. Blinding is not done.

Participants/Inclusion and exclusion criteria

The inclusion criteria were included; Swimmers 11 to 22 years old FHP angle greater than 47 degrees and FSP angle greater than 50 degree At least 1 month history of shoulder pain for participants with shoulder pain At least pain severity 4 out of 10 during activity on VAS for participants with shoulder pain Confirmation of informed consent form The exclusion criteria were included; History of fracture, surgery and/or arthritic diseases in upper extremity, shoulder girdle or/and spinal column Tear of the rotator cuff Cervical radiculopathy Shoulder instability Systemic musculoskeletal disease Structural chest deformity Hyper-kyphosis or scoliosis Sever pain during assessments or tape application Skin problems in the taped area or tape application contraindication

Intervention groups

Intervention group: This group, in addition to exercise training related to control group, receives kinetic typing for a period of 10 weeks. Control group: A therapeutic exercise included a 10-week stretching and strengthening exercise program comprised of three 70-min sessions per week.

Main outcome variables

Static posture include: Forward-head posture; Forward-shoulder posture; Resting pectoralis minor length. Dynamic posture include: Glenohumeral internal- and external-rotation rang of motion; Scapular upward rotation;Scapular anterior tilting.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20170114031942N3**
Registration date: **2018-02-17, 1396/11/28**
Registration timing: **registered_while_recruiting**

Last update: **2018-02-17, 1396/11/28**
Update count: **0**

Registration date

2018-02-17, 1396/11/28

Registrant information

Name

Aynollah Naderi

Name of organization / entity

Shahrood University of Technology

Country

Iran (Islamic Republic of)

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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2018-01-20, 1396/10/30
Expected recruitment end date
2018-02-19, 1396/11/30
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Comparison of the Effects of Kinesio Taping in Combination with Exercise Training with only Exercise Training on the Static and Dynamic Posture of Forward-head, Forward-shoulder Posture Swimmers with and without pain

Public title
Kinesio Taping as an adjunct to Exercise Therapy for Swimmers with Forward-head, Forward-shoulder Posture
Purpose
Basic scienece
Inclusion/Exclusion criteria
Inclusion criteria:
Swimmers 11 to 22 years old FHP angle >47 degrees FSP angle >50 degree At least 1 month history of shoulder pain for participants with pain At least pain severity 4 out of 10 during activity on VAS for participants with pain Confirmation of informed consent form
Exclusion criteria:
History of fracture, surgery and/or arthritic diseases in upper extremity, shoulder girdle or/and spinal column Tear of the rotator cuff Cervical radiculopathy Shoulder instability Systemic musculoskeletal disease Structural chest deformity Hyper-kyphosis or scoliosis Sever pain during assessments or tape application Skin problems in the taped area or tape application contraindication
Age
From **11 years** old to **22 years** old
Gender
Male

Phase
3
Groups that have been masked
No information
Sample size
Target sample size: **40**
Actual sample size reached: **40**
Randomization (investigator's opinion)
Randomized
Randomization description
Participants are enrolled by one of the research colleagues. An independent assessor, blinded person who had no further involvement in the study made a random allocation sequence using a computer Software prior to the initiation of the study that was used to randomize participants with 1:1 allocation ratio. A block randomization design (block size of 2, 4) were applied to ensure an equal number of participants in each group. Randomization was stratified by pain (with pain vs. without pain) to ensure equal numbers of with pain and without pain swimmers in each study group. Group allocation was concealed in sequentially numbered, opaque, sealed envelopes, and corresponding envelopes were opened after enrolled participants completed all baseline assessments. As it is impossible to blind, laboratory specialists assessing the variables and data analyst were blinded to the allocation. Participants and corrective specialist providing the exercise training and physical therapist providing the KT were not blinded to group allocation.
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of shahroud university of medical sciences
Street address
Seventh Tir Square, Shahroud
City
shahroud
Province
Semnan
Postal code
۳۶۱۴۷-۷۳۹۴۷
Approval date
2018-01-01, 1396/10/11
Ethics committee reference number
IR.SHMU.REC.1396.148

Health conditions studied

1

Description of health condition studied
Forward head and forward posture
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Forward head- forward shoulder posture
Timepoint
Measurement of forward head-forward shoulder postures at the beginning of the study (before the intervention) and immediately and 10 weeks after the start of the exercise training and kinesiotyping programs
Method of measurement
side-view photograph taken in a relaxed-standing posture

2

Description
Resting pectoralis minor length
Timepoint
Measurement of resting pectoralis minor length at the beginning of the study (before the intervention) and immediately and 10 weeks after the start of the exercise training and kinesiotyping programs
Method of measurement
Tape measure

3

Description
Glenohumeral internal- and external-rotation ROM
Timepoint
Measurement of glenohumeral internal- and external-rotation ROM at the beginning of the study (before the intervention) and immediately and 10 weeks after the start of the exercise training and kinesiotyping programs
Method of measurement
Digital inclinometer

4

Description
Scapular upward rotation
Timepoint
Measurement of scapular anterior tilting at the beginning of the study (before the intervention) and immediately and 10 weeks after the start of the exercise training and kinesiotyping programs
Method of measurement
Ruler

Secondary outcomes

1

Description
Pain severity
Timepoint
Measurement of pain severity at the beginning of the study (before the intervention) and immediately and 10 weeks after the start of the exercise training and kinesiotyping programs
Method of measurement
100-mm visual analogue scale (VAS)

Intervention groups

1

Description
Intervention group: kinsiotape -exercise group received a 10-week stretching and strengthening exercise program comprised of three 45-min sessions per week. Intervention sessions were conducted by a corrective exercise specialist in two group (n=10). Strengthening exercises targeted the scapular retractor and shoulder external rotator muscles. Participants performed three sets of 10 repetitions of all strengthening exercises. The stretching exercises aimed at increasing the flexibility of the pectoralis muscles, cervical neck extensors, and shoulder internal rotator muscles. Exercises were selected based on previous literatures. In addition to exercise training, receives kinetic typing for a period of 10 weeks. First two KT strips were used for mechanical correction with 50-100% stress. Tape was applied from the anterior aspect of the acromioclavicular joint to the T12 spinous process in a diagonal fashion. Other KT strip were used to supraspinatus muscle which mainly provides scapular stability. We used the KT Y-shaped strip to the deltoid muscle that was placed 3 cm below the deltoid tuberosity of the humerus without tension.
Category
Rehabilitation

2

Description
Control group: The exercise group received a 10-week stretching and strengthening exercise program comprised of three 45-min sessions per week. Intervention sessions were conducted by a corrective exercise specialist in two group (n=10). Strengthening exercises targeted the scapular retractor and shoulder external rotator muscles. Participants performed three sets of 10 repetitions of all strengthening exercises. The stretching exercises aimed at increasing the flexibility of the pectoralis muscles, cervical neck extensors, and shoulder internal rotator muscles. Exercises were selected based on previous literatures.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Public and university pools of the city
Full name of responsible person
Aynollah Naderi
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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Full name of responsible person
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Tehran avenue, Shahroud, Semnan province
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Shahroud University of Technology
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
Shahrood University of Technology
Full name of responsible person
Aynollah Naderi
Position
Assistant Professor
Latest degree
Ph.D.
Other areas of specialty/work
Physical Education and Sports Science
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Person responsible for updating data

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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
Yes - There is a plan to make this available
Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
The total potential data can be shared after unidentifiable participants
When the data will become available and for how long
Starting the access period 1 year after printing the results for duration1 year
To whom data/document is available
Both researchers working in academic and scientific institutions and those employed in the industry can access to data or other documentation.
Under which criteria data/document could be used
If the requesting person applies for reasonable documentation and data and apply for proper purposes.
From where data/document is obtainable
Contact the telephone number 09177217462 or e-mail ay.naderi@yahoo.com to receive the documentation or data.
What processes are involved for a request to access data/document
After the message is sent by the requesting person, the documents or data are send to the requesting person for one week.
Comments