Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effect and Comparison of two manual therapy methods on Glenohumeral Internal Rotation in18-35 years old male over head athlete with glenohumeral internal rotation deficit

Protocol summary

Summary

We investigated about the effect of mobilization and stretching therapy on shoulder internal rotation in this study. The study comprised 30 asymptomatic male participants who were randomly (using block randomization) assigned to 1 of 2 groups: stretching only (n:15) and stretching plus scapulothoracic and glenohumeral joint mobilizations (n:15). All had a between shoulder difference of 15 degrees or more in internal rotation. Exclusion criteria included a history of shoulder surgery, shoulder symptoms requiring medical treatment in the last year or shoulder pain at the time of study. One group performed the cross-body stretch alone by passively pulling the humerus across the body into horizontal adduction with the opposite arm. Each athlete performed 5 repetitions of the cross-body stretch, holding each for 30 seconds. The second group performed the cross-body stretch as described for the first group; in addition they received joint mobilization. Athletes were treated with grade III and IV joint mobilizations (oscillatory method) with 10 repetitions.The intervention has been performed on three sessions every other day. Active and passive range of motion measurements were taken at the initiation and completion of the study.

General information

Acronym

GIRD

IRCT registration information

IRCT registration number: **IRCT2016050724149N31**
Registration date: **2016-10-07, 1395/07/16**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2016-10-07, 1395/07/16

Registrant information

Name

Fahimeh Kamali

Name of organization / entity

Shiraz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 71 1627 1551

Email address

kamalif@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for research of Shiraz University of Medical Science

Expected recruitment start date

2015-12-20, 1394/09/29

Expected recruitment end date

2016-04-19, 1395/01/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect and Comparison of two manual therapy methods on Glenohumeral Internal Rotation in18-35 years old male over head athlete with glenohumeral internal rotation deficit

Public title

Effect of manual therapy on shoulder internal rotation

Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria: Male over head athletes with 15 or more GIRD (difference in internal rotation between dominant and non dominant shoulders); age range between 18 and 35 years. Exclusion criteria: Shoulder surgery; shoulder pain requiring treatment or medication during the last year; shoulder pain during the study period; shoulder injuries and fractures of the shoulder girdle during the last year; cancer and rheumatic diseases; substance abuse; communication disorders; history of surgery on neck and shoulders; history of neurological deficit (central or peripheral); coagulation disorders; radicular pain from cervical vertebrae.
Age
From **18 years** old to **35 years** old
Gender
Male

Phase
2
Groups that have been masked
No information
Sample size
Target sample size: **30**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Single blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features
Randomization in this study has been performed using block randomization method.

Secondary Ids

1

Registry name
-
Secondary trial Id
-
Registration date
empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Shiraz University of Medical Sciences
Street address
Postal code: 71345-1733, Abivardi St, Chamran Blv
City
Shiraz
Postal code
71345-1733
Approval date
2015-12-13, 1394/09/22
Ethics committee reference number
IR.SUMS.REC.1394.169

Health conditions studied

1

Description of health condition studied
GIRD (glenohumeral internal rotation deficit)
ICD-10 code
13
ICD-10 code description
Diseases of the musculoskeletal system and connective tissue

Primary outcomes

1

Description
ROM (active and passive shoulder internal rotation)
Timepoint
Before intervention and after 3 sessions of intervention
Method of measurement
Imaging and measuring the angle by ImageJ software

Secondary outcomes

1

Description
ROM (active and passive shoulder external rotation)
Timepoint
Before intervention and after 3 sessions of intervention
Method of measurement
Imaging and measuring the angle by ImageJ software

Intervention groups

1

Description
Intervention group 1 : One group performed the cross-body stretch alone by passively pulling the humerus across the body into horizontal adduction with the opposite arm. Each athlete performed 5 repetitions of the cross-body stretch, holding each for 30 seconds.
Category
Other

2

Description
Intervention group 2 : The second group performed the cross-body stretch as described for the first group; in addition they received joint mobilization.

Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Country Clubs
Full name of responsible person
Davood Nejati
Street address
Shiraz, Fars, Iran
City
Shiraz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Shiraz University of Medical Sciences
Full name of responsible person
Fahimeh Kamali
Street address
Postal code: 71345-1733, Abivardi St, Chamran Blv
City
Shiraz
Grant name
-
Grant code / Reference number
-
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Shiraz University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Shiraz University of Medical Sciences
Full name of responsible person
Narjes Ghasempour
Position
MS student
Other areas of specialty/work
Street address
Abiverdi St, Chmaran Blv, Shiraz, Iran
City
Shiraz
Postal code
71345-1733
Phone
+98 71 3627 1551
Fax
Email
narjes.ghasempour@gmail.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Rehabilitation School, Shiraz University of Medical Sciences
Full name of responsible person
Fahimeh kamali
Position
Academic staff of Shiraz University of Medical Sciences
Other areas of specialty/work
Street address
Abiverdi St, Chmaran Blv, Shiraz, Iran
City
Shiraz
Postal code
71345-1733
Phone
+98 71 3627 1551
Fax
Email
fahimehkamali@hotmail.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Shiraz University of Medical Sciences
Full name of responsible person
Narjes Ghasempour
Position
MS student
Other areas of specialty/work
Street address
Abiverdi St, Chmaran Blv, Shiraz, Iran
City
Shiraz
Postal code
71345-7133
Phone
+98 71 3627 1551
Fax
Email
narjes.ghasempour@gmail.com
Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty