

Clinical Trial Protocol

Iranian Registry of Clinical Trials

15 Jun 2026

The effects of Active Release Technique and exercise therapy on pain and function in nonprofessional adult athletes with chronic supraspinatus tendinopathy

Protocol summary

Study aim

The effects of Active Release Technique and exercise therapy on pain and function in nonprofessional adult athletes with chronic supraspinatus tendinopathy

Design

A randomized trial with a control group, a single blind strain on 30 patients was used for randomization using the block method

Settings and conduct

Invitation-Match the bags with the study criteria- Providing explanations and receiving consent from the cases-Referring the cases to an orthopedic specialist and receiving a written confirmation of the case's damage Our study in cases-Randomization of cases into two intervention and control groups-Evaluation of range of motion of flexion, abduction, external rotation of the shoulder with an inclinometer, evaluation of the strength of the supraspinatus muscle with a dynamometer, evaluation of the pressure pain threshold of the muscles of the supraspinatus, middle deltoid, and upper trapezius with an algometer, and determining the level of visual pain with the VAS questionnaire by therapist different from the researcher-Starting the treatment with the protocol of the intervention group: performing 12 ART sessions three times a week and simultaneously 12 exercise sessions three times a week. Control group protocol: 12 training sessions three times a week-Re-evaluation

Participants/Inclusion and exclusion criteria

Non-professional athletes 2) Pain in sport activities in last 3 months 3) Age limitation 20-45 4) Body mass index below 30 5) being positive at least 2 of these tests: empty can, painful arc, Hawkins exclusion 1) all contraindications of shock wave 2) history of surgery, fracture or osteoarthritis in the treatment areas

Intervention groups

1) 12 ART sessions three times a week, 12 training

sessions three times a week

Main outcome variables

pain reduction, Improve range of motion and quality of life

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20221007056107N1**

Registration date: **2023-01-07, 1401/10/17**

Registration timing: **prospective**

Last update: **2023-01-07, 1401/10/17**

Update count: **0**

Registration date

2023-01-07, 1401/10/17

Registrant information

Name

Ghazal Limoie

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 8809 6337

Email address

limooie.gh.72@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-01-21, 1401/11/01

Expected recruitment end date

2023-04-19, 1402/01/30

Actual recruitment start date

empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effects of Active Release Technique and exercise therapy on pain and function in nonprofessional adult athletes with chronic supraspinatus tendinopathy

Public title
Effect of ART on chronic supraspinatus tendinopathy

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
non-professional athletes(2 to 3 hours per week) pain in sport activities in last 3 month Age limitation 20-45 Body mass index below 30 being positive at least 2 of these test : empty can, painful arc,Hawkins
Exclusion criteria:
history of surgery, fracture or osteoarthritis in the treatment areas frozen shoulder all contraindication of manual tecnique

Age
From **20 years** old to **45 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description
aabb Bbaa Abab Baba Abba Baab 1)Write these items on six paper and put in the six packets 2) Draw eight times until eight envelopes are selected , provided that the envelopes are repeated 3) Each characteristics of the specification of the four allocations of the individual

Blinding (investigator's opinion)
Single blinded

Blinding description
After the examination (by another physiotherapist) and making sure that they have the conditions to enter the study, people will be admitted to one of the ART groups or exercise therapy through a sealed envelope.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids
empty

Ethics committees

1

Ethics committee

Name of ethics committee

ethic committee of Iran University of medical science

Street address

Iran University of Medical Sciences ,Next to Borj Milad, Hammet Highway

City

tehran

Province

Tehran

Postal code

1449614535

Approval date

2022-10-04, 1401/07/12

Ethics committee reference number

IR.IUMS.REC.1401.562

Health conditions studied

1

Description of health condition studied

Shoulder impingment syndrome

ICD-10 code

M75.1

ICD-10 code description

Rotator cuff tear or rupture, not specified as traumatic

Primary outcomes

1

Description

1-Range of motion of flexion, abduction, external rotation of the shoulder

Timepoint

At the first and end of treatment program

Method of measurement

Range of motion with inclinometer.

2

Description

Strength of the supraspinatus muscle.

Timepoint

At the first and end of treatment program

Method of measurement

Strength muscle with dynamometer

3

Description

Pain pressure threshold of the muscle of supraspinatus , middle deltoid , and upper trapezius .

Timepoint

At the first and end of treatment program

Method of measurement

Pain pressure thresholde with algometer

4

Description

Amount of Visual Analog Scale before and after each session.

Timepoint

Before and after of each session

Method of measurement

Visual Analog Scale (VAS) questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Intervention group: 12 sessions (3 sessions per week) of the ART technique are performed on the supraspinatus, middle deltoid, and upper trapezius muscles and moved shorting muscle length to long muscle length. This contact is held for 5-10 s. This was performed 3-5 times.

Category

Rehabilitation

2

Description

Control group: Control group: 12 sessions (3 sessions per week) exercises include: scapula stabilizer (external rotation-scapion lawn mower) and rotator cuff strengthening (side lying external rotation). The intensity of these exercises in the first two weeks is 30-40 1RM and in the second two weeks 50-70 1RM. 3 sets of 12 and stretching exercises (cross body and corner stretch) 3 sets of 30 seconds

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

oxin physiotherapy

Full name of responsible person

Ghazal Limooie

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No.11/9, Fakharmoghadam Ave., Dadman Ave., Sanat Sq., Qods Town

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Iran University of Medical Sciences

Full name of responsible person

Ghorban Taghizadeh

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Physical Therapy Dept., 3rd floor, school of rehabilitation sciences, Madadkaran Ave., Shah nazari St., Maadar Sq., Mirdamaad Blv., Tehran, Iran

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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

Iran 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

Iran University of Medical Sciences

Full name of responsible person

Ghazal Limooie

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Physiotherapy

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Person responsible for scientific inquiries

Contact

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

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

Study Protocol

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

Statistical Analysis Plan

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

Informed Consent Form

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

Clinical Study Report

Undecided - It is not yet known if there will be 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

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