

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

Comparison of strength training types in shoulder joint skill function after biomechanics sports in volleyball players

Protocol summary

Study aim

Examining the effect of strength training

Design

2 Intervention groups and a control group: blind strain: targeted random: Excel and SAPS: software

Settings and conduct

2 Intervention groups performed 2 different methods of strength training in 8 sessions in the gym and the control group did not perform any type of strength training during this period the subjects were not aware of the results of the research

Participants/Inclusion and exclusion criteria

Girl: university student researcher: Professional volleyball player: healthy without damage

Intervention groups

Grup1 strength training with halter: group2 strength training with a bodybuilding machine: the third group of controls without performing strength training

Main outcome variables

Different effects of strength training on shoulder joint biomechanics

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20240212060970N1**

Registration date: **2024-02-17, 1402/11/28**

Registration timing: **retrospective**

Last update: **2024-02-17, 1402/11/28**

Update count: **0**

Registration date

2024-02-17, 1402/11/28

Registrant information

Name

Iran parsa

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 17 3263 4308

Email address

rezvan329@chmail.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-02-13, 1401/11/24

Expected recruitment end date

2023-06-25, 1402/04/04

Actual recruitment start date

2023-02-13, 1401/11/24

Actual recruitment end date

2023-06-25, 1402/04/04

Trial completion date

2023-06-25, 1402/04/04

Scientific title

Comparison of strength training types in shoulder joint skill function after biomechanics sports in volleyball players

Public title

Comparison of the effects of resistance training on kinetic and kinematic variables at different angular speeds when opening the shoulder joint in volleyball players

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria:

Volleyball student girls with a background in volleyball

Exclusion criteria:

Girl: student of the Arab research university: volleyball players ports history 3to5 years: No physical

abnormalities

Age
From **19 years** old to **27 years** old

Gender
Female

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **30**
Actual sample size reached: **30**
More than 1 sample in each individual
Actual sample size in each individual: **3**
3 Types of methods per person

Randomization (investigator's opinion)
Randomized

Randomization description
Examples available in 3 groups random simple individual with sealed envelopes they were divided

Blinding (investigator's opinion)
Single blinded

Blinding description
Participants

Placebo
Not used

Assignment
Parallel

Other design features
Effect of different types of strength training

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of the Ardabili research university

Street address
University street next to shurabil

City
Ardabil

Province
Ardabil

Postal code
5619911367

Approval date
2024-02-13, 1402/11/24

Ethics committee reference number
IR.UMA.REC.1402.087

Health conditions studied

1

Description of health condition studied

Biomechanics effects of strength training on volleyball players

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Kinetic and Kinematic variables of the shoulder joint such as torque and joint power

Timepoint

After the end of the strength training course

Method of measurement

Iconoclastic device

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: group1 barbell and dumbbell exercises: group 2 exercises with special bodybuilding devices

Category

Other

2

Description

Control group: group3 control without any exercise program

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Ardebil sports medicine association

Full name of responsible person
Roghaye parsae

Street address
The new wolf 27

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Rezvan329@chmail.ir

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The university of research ardabil

Full name of responsible person

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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

Researcher

Proportion provided by this source

100

Public or private sector

Private

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Persons

Person responsible for general inquiries

Contact

Name of organization / entity

University of reaserch ardabili

Full name of responsible person

Mohsen Barghamadi

Position

Associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Biomechanics of sports

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Person responsible for updating data

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Full name of responsible person

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Researcher

Latest degree

Master

Other areas of specialty/work

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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

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available