

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

The effect of 12 weeks of compound set training on cardiostrophin-1 and platelets and their relationship after one circuit training session in young active male

Protocol summary

Study aim

The effect of 12 weeks of compound set training on cardiostrophin-1 and platelets and their relationship after one circuit training session in young active male

Design

Clinical trial with control group

Settings and conduct

Twenty active men were selected in Ardabil city and they will be randomly assigned to the control and experimental groups. Subjects will complete a 60-minute circle training session. Blood samples will be taken before and after this 60 minutes exercise. This circular exercise consisted of 10 stations (leg press, chest press, arm with bar, arm armature wiring harness, front leg, parallel, the back of the wiring arm , boat arm, bar head, and leg leg). The duration of each station will be 15 seconds and the rest between stations will be 45 seconds. Exercise intensity will be 40-60% of a maximum repetition. The training set will run for 12 weeks and 3 sessions per week. After twelve weeks, subjects will perform a circular training session again and blood samples will be taken before and after this session.

Participants/Inclusion and exclusion criteria

Non-smoker; no history of cardiovascular disease, hypertension, underlying injuries, sleep disorders and not taking medication, supplementation and caffeine at least 48 hours before the tests.

Intervention groups

12 weeks of compound set training

Main outcome variables

Cardiostrophin-1; platelets

General information

Reason for update

Acronym

CCPC

IRCT registration information

IRCT registration number: **IRCT20181114041655N3**

Registration date: **2019-07-31, 1398/05/09**

Registration timing: **registered_while_recruiting**

Last update: **2019-07-31, 1398/05/09**

Update count: **0**

Registration date

2019-07-31, 1398/05/09

Registrant information

Name

Ameneh Pourrahim Ghouroughchi

Name of organization / entity

Mohaghegh-e-Ardabili University

Country

Iran (Islamic Republic of)

Phone

+98 45 3150 5647

Email address

a.pourrahim@uma.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-07-27, 1398/05/05

Expected recruitment end date

2019-08-11, 1398/05/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of 12 weeks of compound set training on

cardiotrophin-1 and platelets and their relationship after one circuit training session in young active male

Public title

The effect of resistance training on cardiotrophin-1 and platelets and their relationship in young active male

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria:

Having at least two years of resistance training history

Exclusion criteria:

Smoking history of cardiovascular disease hypertension

Sleep disorders Using supplements and caffeine at least 48 hours prior to the tests.

Age

From **22 years** old to **27 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **20**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Semi-experimental

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Ardabil University of Medical Sciences

Street address

University Ave

City

Ardabil

Province

Ardabil

Postal code

5619911367

Approval date

2019-07-21, 1398/04/30

Ethics committee reference number

IR.ARUMS.REC.1398.187

Health conditions studied

1

Description of health condition studied

No

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

A first session of a circular practice. 12 weeks compound training. A second circle practice session

Timepoint

Before a first session of a circular practice. Before 12 weeks compound training. Before and after a second circle practice session

Method of measurement

A circular exercise with 10 stations (leg presses, chest presses, arm bolts, armhole wraps, front legs, parallaxes, wrist strap arms, boat armpits, barbells and back legs) and 12-week compendium training.

Secondary outcomes

1

Description

Cardiotrophin-1

Timepoint

Before and after a first session of a circular practice. Before and after a second session a circular practice

Method of measurement

With Kate Zebbieu making Germany and ELISA

2

Description

Platelets

Timepoint

Before and after a first session of a circular practice. Before and after a second session a circular practice

Method of measurement

With Sysmex K-1000 Auto Analyst (Made in Japan)

Intervention groups

1

Description

Intervention group: A training session and 12 weeks group. Blood samples are taken from the subjects. Then the subjects do a resistance training session. Blood samples are taken. Then the subjects do 12 weeks of compound set training. Third blood samples are taken. Subjects do a resistance training session like the first one, and fourth blood samples are taken.

Category

Other

2

Description

Control Group: Blood samples are taken from the subjects. Then the subjects do a resistance training session. Blood samples are taken. Then, 12 weeks are spent without performing any training and compound exercise. Third blood samples are taken. Subjects do a resistance training session like the first one, and fourth blood samples are taken.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Mohaghegh Ardabili University

Full name of responsible person

Ameneh pourrahim Ghouroghchi

Street address

University Ave

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Phone

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Email

amenehpoorrahim@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

The University of Mohaghegh

Full name of responsible person

Azim Omidvar

Street address

Ardabil Ave

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Phone

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Email

Azim_omidvar@yahoo.com

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

The University of Mohaghegh

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

The university of Mohaghegh Ardabili

Full name of responsible person

Ameneh pourrahim Ghouroghchi

Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

Sport physiology

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Person responsible for scientific inquiries

Contact

Name of organization / entity

The university of Mohaghegh

Full name of responsible person

Ameneh pourrahim Ghouroghchi

Position

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Person responsible for updating data

Contact

Name of organization / entity

The university of Mohaghegh Ardabili

Full name of responsible person

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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

Not applicable

Title and more details about the data/document

The effect of 12 weeks of compound set training on cardiostrophin-1 and platelets and their relationship after one circuit training session in young active male

When the data will become available and for how long

summer 2020

To whom data/document is available

all

Under which criteria data/document could be used

With references

From where data/document is obtainable

Interent

What processes are involved for a request to access data/document

Search

Comments