Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

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

Protocol summary

Study aim
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

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
Cardiotrophin-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 Ghouroghchi
Name of organization / entity
Mohaghegh-e-Ardabili University
Country
Iran (Islamic Republic of)
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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 Śleep 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. Before12 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 Zelbieu 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

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University Ave

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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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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

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The university of Mohaghegh

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Ameneh pourrahim Ghouroghchi

Position
Assistant professor

Latest degree
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Other areas of specialty/work
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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 cardiotrophin-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