Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of the rate of lactic acid excretion during the return to initial state by performing yoga techniques and vibration of the whole body and cold water pool in the selected football team

Protocol summary

Study aim
Comparison of the rate of lactic acid excretion during the return to initial state by performing yoga techniques and vibration of the whole body and cold water pool in the selected football team

Design
A clinical trial with a control group, with parallel groups, randomized, on 60 footballers (4 groups of 15 people). Excel software rand function was used for randomization.

Settings and conduct
This study is on the footballers in the football leagues of Semnan province.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Footballer with 6 months of continuous training in advance; Lack of physical and motor problems. Exclusion criteria: Reluctance to continue collaborating in research.

Intervention groups
Intervention group 1: Fifteen footballers practice yoga for 15 minutes according to the protocol. At the end of the yoga, their blood lactic acid is measured. Intervention group 2: 15 footballers; According to the protocol, they are placed in a cold pool with a temperature of 10-15 degrees Celsius for 15 minutes (the whole body except the head). After leaving the cold pool, their blood lactic acid is measured. Intervention group 3: 15 footballers; According to the protocol, it is placed on a vibrating device at a speed of 20 Hz for 15 minutes. After vibration, their blood lactic acid is measured. Control group: 15 footballers sit on a chair for 15 minutes. After 15 minutes, their blood lactic acid is measured.

Main outcome variables
Blood lactic acid

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20151228025732N61**
Registration date: **2020-10-30, 1399/08/09**
Registration timing: **registered_while_recruiting**

Last update: **2020-10-30, 1399/08/09**
Update count: **0**

Registration date
2020-10-30, 1399/08/09

Registrant information

Name
Alireza Emadi

Name of organization / entity
Semnan University of Medical Sciences, Semnan, Iran

Country
Iran (Islamic Republic of)

Phone
+98 23 3345 1336

Email address
are20935@semums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-12-17, 1398/09/26

Expected recruitment end date
2020-12-16, 1399/09/26

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title

Comparison of the rate of lactic acid excretion during the return to initial state by performing yoga techniques and vibration of the whole body and cold water pool in the selected football team

Public title
Comparison of the rate of lactic acid excretion during the return to initial state by performing yoga techniques and vibration of the whole body and cold water pool in the selected football team
Purpose
Health service research
Inclusion/Exclusion criteria
Inclusion criteria:
Footballer with 6 months of continuous training in advance Lack of physical and motor problems
Exclusion criteria:
Reluctance to continue collaborating in research
Age
No age limit
Gender
Male

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **60**
Randomization (investigator's opinion)
Randomized
Randomization description
Participants will be randomly assigned to four groups of intervention and control with 15 members using block randomization with block sizes of 4. Randomized permutation blocks (block 4). Excel software rand function was used for randomization.
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee Islamic Azad University- Semnan Branch
Street address
Opposite Sokan Park
City
Semnan
Province
Semnan
Postal code
3513119111
Approval date
2019-12-17, 1398/09/26
Ethics committee reference number
IR.IAU.SEMNAN.REC.1398.026

Health conditions studied

1

Description of health condition studied
Severe boring activity
ICD-10 code
Y93.6A
ICD-10 code description
Activity, physical games generally associated with school recess, summer camp and children

Primary outcomes

1

Description
Blood lactic acid
Timepoint
Resting, immediately after Cunningham test, 5 minutes after test and 15 minutes after returning to normal
Method of measurement
Blood lactate meter

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group 1: Fifteen footballers practice yoga for 15 minutes according to the protocol. At the end of the yoga, their blood lactic acid is measured.
Category
Rehabilitation

2

Description
Intervention group 2: 15 footballers; According to the protocol, they are placed in a cold pool with a temperature of 10-15 degrees Celsius for 15 minutes (the whole body except the head). After leaving the cold pool, their blood lactic acid is measured.
Category
Diagnosis

3

Description
Intervention group 3: 15 footballers; According to the

protocol, it is placed on a vibrating device at a speed of 20 Hz for 15 minutes. After vibration, their blood lactic acid is measured.

Category
Diagnosis

4

Description
Control group: 15 footballers sit on a chair for 15 minutes. After 15 minutes, their blood lactic acid is measured.

Category
Diagnosis

Recruitment centers

1

Recruitment center

Name of recruitment center
Islamic Azad University, Semnan Branch

Full name of responsible person
Mohammad Rashidi

Street address
Semnan Islamic Azad University, 5 km of Damghan road, Semnan.

City
Semnan

Province
Semnan

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3513119111

Phone
+98 23 3365 4040

Email
are20935@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Islamic Azad University

Full name of responsible person
Mohammad Karim Sohrabi

Street address
Semnan Islamic Azad University, 5 km of Damghan road, Semnan.

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n@semnaniau.ac.ir

Grant name

Grant code / Reference number

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

Title of funding source
Islamic Azad University

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
Islamic Azad University

Full name of responsible person
Mohammad Rashidi

Position
Associate professor

Latest degree
Ph.D.

Other areas of specialty/work
Physical Education

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Semnan Islamic Azad University, 5 km of Damghan road, Semnan.

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Person responsible for scientific inquiries

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Person responsible for updating data

Contact

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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

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