

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 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

**Postal code**

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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**Email**

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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## Person responsible for updating data

### Contact

**Name of organization / entity**

Islamic Azad University

**Full name of responsible person**

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**Latest degree**

Ph.D.

**Other areas of specialty/work**

Physical Education

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**City**

## 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