

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Comparison of the Effect of Functional Corrective Exercises and Corrective Games on Upper Crossed Syndrome in Boys 10-13 Years Old

Protocol summary

Study aim

Comparison of the Effect of Functional Corrective Exercises and Corrective Games on Upper Crossed Syndrome in Boys 10-13 Years Old

Design

This will be a clinical trial with a pretest-posttest design. Thirty-six samples of male students with Upper Crossed Syndrome were purposefully selected and randomly divided into three equal groups of 12: two intervention groups, corrective movements, corrective games, and one control group.

Settings and conduct

The research protocol will be conducted in Silvana City schools. The first group will perform Functional Corrective Exercises for eight weeks and the second group will perform corrective games during the same period. The control group will not perform any exercise. Before and after exercise intervention, the amount of Forward Head and Round Shoulder angles will be evaluated by lateral view photography and the amount of Kyphosis by a Flexible Ruler.

Participants/Inclusion and exclusion criteria

Inclusion Criteria: 1- Male students between the ages of 10 and 13 who have not reached puberty. 2- Having three anomalies of Forward Head, Round shoulder, Kyphosis Exclusion Criteria: 1-Participants' dissatisfaction with the exercises 2- History of fractures and other diseases 3- People with BMI less than 18 and greater than 35

Intervention groups

Intervention groups: 1- Functional corrective training group, which will receive corrective exercises 2- Corrective Games group, which will receive corrective games with practice approach. Control group: A group that will not perform any exercises.

Main outcome variables

Forward Head rate using Photogrammetry before and after intervention exercises Round Shoulder rate using Photogrammetry before and after intervention exercise

Kyphosis rate using Flexible Ruler before and after the intervention exercise Other variables to be measured include: Age, Height, Weight, Body Mass Index

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200125046250N1**

Registration date: **2020-02-09, 1398/11/20**

Registration timing: **retrospective**

Last update: **2020-02-09, 1398/11/20**

Update count: **0**

Registration date

2020-02-09, 1398/11/20

Registrant information

Name

Sajad Roshani

Name of organization / entity

Urmia University

Country

Iran (Islamic Republic of)

Phone

+98 44 3345 8110

Email address

srowshani@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-09-23, 1398/07/01

Expected recruitment end date

2019-11-05, 1398/08/14

Actual recruitment start date

2019-10-06, 1398/07/14

Actual recruitment end date

2019-11-20, 1398/08/29

Trial completion date

2020-01-19, 1398/10/29

Scientific title

Comparison of the Effect of Functional Corrective Exercises and Corrective Games on Upper Crossed Syndrome in Boys 10-13 Years Old

Public title

Comparison of the Effect of Functional Corrective Exercises and Corrective Games on Upper Crossed Syndrome

Purpose

Supportive

Inclusion/Exclusion criteria**Inclusion criteria:**

Male students between the ages of 10 and 13 who have not reached puberty. Having three abnormalities forward head at an angle of greater than or equal to 46 degrees, kyphosis greater than 40 degrees, and forward shoulder with an angle of greater than or equal to 52 degrees.

Exclusion criteria:

Participants' dissatisfaction with the exercises History of fractures and other diseases Individuals with BMI less than 18 and greater than 35

AgeFrom **10 years** old to **13 years** old**Gender**

Male

Phase

N/A

Groups that have been masked*No information***Sample size**Target sample size: **33**Actual sample size reached: **36****Randomization (investigator's opinion)**

Not randomized

Randomization description**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**

Iran National Committee for Ethics in Biomedical Research

Street address

Urmia University

City

Urmia

Province

West Azarbaijan

Postal code

5715794953

Approval date

2020-01-14, 1398/10/24

Ethics committee reference number

IR.URMIA.REC.1398.001

Health conditions studied**1****Description of health condition studied**

Upper Crossed Syndrome

ICD-10 code**ICD-10 code description****Primary outcomes****1****Description**

Assessment of three abnormalities (Forward Head, Round Shoulder, Kyphosis) that are referred to as Upper Crossed Syndrome.

Timepoint

Week 1, Week 8

Method of measurement

Forward head and Round shoulder were measured by lateral view photography and the amount of kyphosis with flexible ruler

Secondary outcomes

empty

Intervention groups**1****Description**

1- Intervention group: The group will consist of 12 male students aged 10-13 years who all have Upper Crossed Syndrome. The group will perform researcher-made functional corrective exercises. Functional corrective exercises program will be eight weeks, three sessions per week and 60 minutes per session.

Category

Rehabilitation

2**Description**

2- Intervention group: The group will consist of 12 male students aged 10-13 years who all have Upper Crossed Syndrome. The group will perform researcher-made corrective games exercises. Corrective games program

will be eight weeks, three sessions per week and 60 minutes per session.

Category

Rehabilitation

3

Description

3- Control group: The group will consist of 12 male students aged 10-13 years who all have Upper Crossed Syndrome. Students in this group do not receive any therapeutic exercise or exercise.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Schools of the Silvana Department of Education

Full name of responsible person

Vali Shoghi

Street address

Razhan-Silvsns

City

Urmia

Province

West Azarbaijan

Postal code

5744157855

Phone

+98 44 3242 8877

Email

hosinavrese68@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Urmia University

Full name of responsible person

Narmin Ghani zadeh Hesar

Street address

Road nazlo, Urmia University, Faculty of Physical Education and Sport Sciences

City

Urmia

Province

West Azarbaijan

Postal code

5756151818

Phone

+98 44 3275 2741

Email

info@urmia.ac.ir

Grant name

Grant code / Reference number

Is the source of funding the same sponsor

organization/entity?

Yes

Title of funding source

Urmia 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

Urmia university

Full name of responsible person

Sajad Roshani

Position

Assistant Professor, Department of Exercise Physiology and Corrective Exercises

Latest degree

Ph.D.

Other areas of specialty/work

Corrective Exercise & Sport Injury

Street address

Nazlou Road - Urmia University - Faculty of Physical Education

City

Urmia

Province

West Azarbaijan

Postal code

5756151818

Phone

+98 44 3275 3174

Email

srowshani@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

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Postal code
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Phone
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Email
srowshani@yahoo.com

srowshani@yahoo.com

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

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The purpose of this study was to prevent and treat postural musculoskeletal disorders. This project is applicable to sports medicine researchers and students.

When the data will become available and for how long

Next month the project is defensible. Data can be shared after defense through legal channels.

To whom data/document is available

After defending the thesis, universities and students can access the project.

Under which criteria data/document could be used

For use by future researchers in this field and by the use of sports medicine coaches and specialists

From where data/document is obtainable

Graduate of Urmia University

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

Through graduate studies at Urmia University and University Central Library

Comments

Person responsible for updating data

Contact

Name of organization / entity

Urmia University

Full name of responsible person

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