Clinical Trial Protocol
Iranian Registry of Clinical Trials

04 Nov 2026

The effect of a shoulder injury prevention programme on proprioception and dynamic stability of young volleyball players

Protocol summary

Study aim
The effect of a shoulder injury prevention programme on proprioception and dynamic stability of young volleyball players

Design
A clinical trial with a control group, with parallel groups, one-way blind, using simple randomization with coin toss method, on 32 participants

Settings and conduct
Quasi-experimental with a pre-test-post-test design. Proprioception tests including JPS and TTDPM of the dominant shoulder internal and external rotators will be measured in the laboratory of Shahid Beheshti University using the Isokinetic system pro 4. To determine the shoulder dynamic balance and stability, the upper quarter Y Balance Test will also be used. Single-blinding will be achieved in such a way that no information will be provided to the participants on which group they will be placed in.

Participants/Inclusion and exclusion criteria
Volleyball players Inclusion criteria : Having no severe injuries over the past six months Having at least three years of playing experience in volleyball An average of three training sessions per week Exclusion criteria: Non-participation in more than two training sessions doing any systematic injury prevention program Musculoskeletal Surgery at 6 months prior to study

Intervention groups
Thirty-two healthy young elite male volleyball players from two clubs in the Iran premier league were randomized into two groups: the training group (N=16) who performed the “FIFA 11+ shoulder” programme as warm-up three times per week. The control group (N=16) followed their routine programme meanwhile.

Main outcome variables
Joint Position Sence (JPS), Threshold to detect passive motion (TTDPM), Shoulder Dynamic Stability

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20201030049193N1**
Registration date: **2020-12-04, 1399/09/14**
Registration timing: **registered_while_recruiting**

Last update: **2020-12-04, 1399/09/14**
Update count: **0**

Registration date
2020-12-04, 1399/09/14

Registrant information

Name
Mahdi Hosseinzadeh

Name of organization / entity
Sport Sciences Research Institute of Iran

Country
Iran (Islamic Republic of)

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metti@ssrc.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-11-27, 1399/09/07

Expected recruitment end date
2021-02-02, 1399/11/14

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of a shoulder injury prevention programme on proprioception and dynamic stability of young volleyball players

Public title
"Shoulder Injury Prevention in Volleyball"
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
Having no severe injuries over the past six months
Having at least three years of playing experience in volleyball An average of three training sessions per week
Exclusion criteria:
Non-participation in more than two training sessions
Doing any systematic injury prevention program
Musculoskeletal Surgery at 6 month prior to study
Age
From **14 years** old to **20 years** old
Gender
Male

Phase
N/A
Groups that have been masked

- Participant

Sample size
Target sample size: **32**
Randomization (investigator's opinion)
Randomized
Randomization description
From the 13 teams participating in the Iranian Youth Premier League, two teams will be selected by the available method and the block randomization method will be used to create a random sequence. In this method, blocks of all possible combinations (6 possible modes AABB, ABAB, ABBA, BBAA, BABA, BAAB) are created, then these blocks are numbered and randomly selected and placed one after the other, and thus, participants will be assigned to two groups A (intervention) and B (control).
Blinding (investigator's opinion)
Single blinded
Blinding description
To create single-blind for participants, both intervention and control groups will be given warm-up exercises. The warm-up exercises of the intervention group will be the main exercises of "FIFA 11+ S", but the exercises of the control group will be the same as their normal warm-up exercises in the form of the main exercises of "FIFA 11+ S".
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Sport Sciences Research Institute
Street address
No. 3, Fifth Alley, Mir Emad St., Ostad Motahhari St
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Province
Tehran
Postal code
1587958711
Approval date
2019-03-11, 1397/12/20
Ethics committee reference number
IR.SSRC.REC.1398.024

Health conditions studied

1

Description of health condition studied
Proprioception (JPS and TTDPM) and Shoulder Dynamic Stability
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Joint Position Sense (JPS)
Timepoint
Before the start of the study and then after the end of eight weeks with or without applying the treatment (FIFA 11+S)
Method of measurement
American Biodex Isokinetic Device

2

Description
Threshold to detect passive motion (TTDPM)
Timepoint
Before the start of the study and then after the end of eight weeks with or without applying the treatment (FIFA 11+S)
Method of measurement
American Biodex Isokinetic Device

3

Description
Shoulder Dynamic Stability
Timepoint
Before the start of the study and then after the end of eight weeks with or without applying the treatment (FIFA 11+S)

Method of measurement
Y Balance Test

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Consisting of 16 people and implementing a shoulder injury prevention warm-up program for eight weeks. This program consists of three parts: general warm-up (part I); strength and balance training for the shoulders, elbows, wrists, and fingers (part II); core stability and muscle control exercises (part III).
Category
Prevention

2

Description
Control group: Consists of 16 people and they keep their routine warm-up program for eight weeks
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahid Beheshti University
Full name of responsible person
alireza Sheikh
Street address
Shahid Chamran Highway, Yemen St., Shahid Shahriari Square, Daneshjou Boulevard
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Fax
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Web page address
https://www.sbu.ac.ir/SitePages/Home.aspx

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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Full name of responsible person
Mostafa Zarei
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Shahid Chamran Highway, Yemen St., Shahid Shahriari Square, Daneshjoo Blvd.
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Email
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Web page address
https://www.sbu.ac.ir/SitePages/Home.aspx
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shahid Beheshti 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
Sport Sciences Research Institute of Iran
Full name of responsible person
Mahdi Hosseinzadeh
Position
Assistant professor
Latest degree
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Other areas of specialty/work
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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
Yes - There is a plan to make this available
Title and more details about the data/document
We share data files including personal information and data related to pre-test and post-test in a coded and unanimous folder by the person in charge, Dr. Mehdi Hosseinzadeh, on the website of Shahid Beheshti University.
When the data will become available and for how long
Start the access period as soon as the results are published
To whom data/document is available
It will be available to all research groups as well as all other people who are interested
Under which criteria data/document could be used
The data can be used for future studies as well as in all research groups, and any kind of research analysis and use is allowed on the data, and under the conditions that the person use it should refer to us (the paper published), this data will be provided to them.
From where data/document is obtainable
Refer to the person responsible for answering Dr. Mehdi Hosseinzadeh: Address: No. 3, 5th Alley, Miremad Street, Motahhari Street, Tehran, Iran, Iran Sports Science Research Institute Postal Code: 1587958711 Email: metti@ssrc.ac.ir Phone: 009877146478 Fax: 00988739092
What processes are involved for a request to access data/document
The applicant will send her/his application to the e-mail address of Dr. Mehdi Hosseinzadeh (metti@ssrc.ac.ir) and Dr. Hosseinzadeh will provide the information to her/his after the necessary checks.
Comments