

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The short term effect of static stretch on the dynamic and static balance index in non athletic healthy young girls

#### Protocol summary

##### Summary

This study has been designed to investigate the effect of long and short duration static stretch on the muscular function. In this randomized single blind trial, 45 healthy, non athletic girl will be assigned randomly in one of the three experimental trials, a) 15 seconds static stretch, b) 45 seconds static stretch and c) control group who received no intervention. Inclusion criteria included: Healthy Non-athletic girl Exclusion Criteria included 1) Neuromuscular Disease, 2) Musculoskeletal disease, 3) history of truma in last month, 4) history of lower limb fracture in last year, 5) lower limb deformity, 6) professional athletic. Intervention included three times 15 and 45 seconds static stretch on the three muscle groups of both legs which are 1) Quadriceps, 2) Hamstrings and 3) calf muscles, with 15 second rest between each stretch. Before and after intervention static and dynamic balance index during bilateral standing and also falling risk will be measured by 3D system balance machine.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT138904081254N5**

Registration date: **2010-06-29, 1389/04/08**

Registration timing: **prospective**

Last update:

Update count: **0**

##### Registration date

2010-06-29, 1389/04/08

##### Registrant information

##### Name

Amir Hoshang Bakhtiary Davijani

##### Name of organization / entity

Semnan University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

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##### Email address

amirbakhtiary@sem-ums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Semnan University of Medical Sciences

##### Expected recruitment start date

2010-07-06, 1389/04/15

##### Expected recruitment end date

2010-10-07, 1389/07/15

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The short term effect of static stretch on the dynamic and static balance index in non athletic healthy young girls

##### Public title

The short term effect of static stretch on the dynamic and static balance index in non athletic healthy young girls

##### Purpose

Supportive

##### Inclusion/Exclusion criteria

Inclusion criteria: Healthy Non-athletic girl Exclusion Criteria: 1) Neuromuscular Disease, 2) Musculoskeletal disease, 3) history of truma in last month, 4) history of lower limb fracture in last year, 5) lower limb deformity, 6) professional athletic.

##### Age

From **18 years** old to **24 years** old

**Gender**

Female

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **45**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

**Blinding (investigator's opinion)**

Single blinded

**Blinding description**

**Placebo**

Not used

**Assignment**

Parallel

**Other design features**

**Secondary Ids**

empty

**Ethics committees**

1

**Ethics committee**

**Name of ethics committee**

Semnan University of Medical sciences

**Street address**

Blv Basij. Educational Deputy of University

**City**

Semnan

**Postal code**

**Approval date**

2010-08-08, 1389/05/17

**Ethics committee reference number**

89/11530

**Health conditions studied**

1

**Description of health condition studied**

Static and Dynamic Balance Indexes

**ICD-10 code**

**ICD-10 code description**

**Primary outcomes**

1

**Description**

The rate of center of pressure displacement in the base of support during bilateral standing

**Timepoint**

20 min (before and after stretch training)

**Method of measurement**

3D Balnce system of Biodex

**Secondary outcomes**

1

**Description**

Falling Risk indexes

**Timepoint**

20 min (before and after stretch trainig)

**Method of measurement**

Biodex 3D System balance

**Intervention groups**

1

**Description**

Three 15 seconds static stretch on the Quadriceps, Hamstring and Calf Muscles of both leg with 15 seconds rest between each stretch

**Category**

Rehabilitation

2

**Description**

Three 45 seconds static stretch on the Quadriceps, Hamstring and Calf Muscles of both leg with 15 seconds rest between each stretch

**Category**

Rehabilitation

**Recruitment centers**

1

**Recruitment center**

**Name of recruitment center**

Rehabilitation Research center

**Full name of responsible person**

**Street address**

**City**

Semnan

**Sponsors / Funding sources**

1

**Sponsor**

**Name of organization / entity**

Semnan University of Medical Sciences

**Full name of responsible person**

Dr Faranoush

**Street address**

Basij Blv

**City**

Semnan

**Grant name**

**Grant code / Reference number**

**Is the source of funding the same sponsor**

**organization/entity?**

Yes

**Title of funding source**

Semnan University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

*empty*

**Domestic or foreign origin**

*empty*

**Category of foreign source of funding**

*empty*

**Country of origin****Type of organization providing the funding**

*empty*

**Person responsible for general inquiries****Contact****Name of organization / entity**

Semnan University Medical Sciences

**Full name of responsible person**

Amir Hoshang Bakhtiary

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PhD

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**Web page address****Sharing plan****Deidentified Individual Participant Data Set (IPD)**

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*