Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparison of the two treatment techniques for recovery of hamstring shortness Comparative effects of US and hold relax on shortness of Hamstring

Protocol summary

Summary

The aim of the present study was to compare the effects of ultrasound and Hold relax on shortness of hamstrings. 36 boys students who had bilateral hamstring shortness (SLR<65 Degrees) were candidate for the study. After completing the consent form, the subjects were randomly assigned in one of the three groups. Groups 1 received ultrasound with stretching. Group 2 received hold relax method and group 3 was control group who received routine program. The duration of treatment programs were six days a week for a two-week period. Passive SLR and Passive knee extension were assessed and compared between groups.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138810152995N1**
Registration date: **2010-04-24, 1389/02/04**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2010-04-24, 1389/02/04

Registrant information

Name
Mohammad Amouzadeh Khalili
Name of organization / entity
Semnan University of Medical Sciences
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Iran (Islamic Republic of)
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Recruitment status

Recruitment complete

Funding source

Semnan University of Medical Sciences

Expected recruitment start date

2010-02-15, 1388/11/26

Expected recruitment end date

2010-04-15, 1389/01/26

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the two treatment techniques for recovery of hamstring shortness Comparative effects of US and hold relax on shortness of Hamstring

Public title

Comparison of the two treatment techniques for recovery of hamstring shortness

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Healthy male between 18-30 years old, SLR less than 65 degrees, signing consent form
Exclusion; Presence of orthpedic, neurologic or heart diseases, regular and professional sports

Age

From **18 years** old to **30 years** old

Gender

Male

Phase

2

Groups that have been masked
No information
Sample size
Target sample size: **36**
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
The ethics committee of Semnan university of medical sciences
Street address
Semnan university of Medical Sciences, Semnan, Iran،
City
Semnan
Postal code
35131-38111
Approval date
2009-08-18, 1388/05/27
Ethics committee reference number
2/6415/Ī

Health conditions studied

1

Description of health condition studied
Musculoskeletal disorders
ICD-10 code
M95
ICD-10 code description
Other acquired deformities of musculoskeletal system and connective tissue

Primary outcomes

1

Description
maximum ROM in SLR,
Timepoint
Two months
Method of measurement
Goniometer

Secondary outcomes

empty

Intervention groups

1

Description
Group 2: Using Hold relax method on the lower limbs, during a four weeks period, three days a week, in each sesssion applied 4 triple cycle of hold relax, each cycle was 10 sec. contraction with a five sec. rest.
Category
Rehabilitation

2

Description
Control group: routine activities.
Category
N/A

3

Description
Group 1: application of US with stretch, during a four weeks period, three days a week, each session 4 minutes US with 4 minutes stretch, the intensity of US will be set as 1 MHZ.
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Tadayoun Rehabilitation Clinic, Semnan, Iran
Full name of responsible person
Dr Amouzadeh
Street address
Rajaie Street, Tadayoun Clinic, Semnan, Iran
City
Semnan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Semnan University of Medical Sciences
Full name of responsible person
Dr Ghorbanie
Street address
Research Office, Semnan University of Medical Sciences, Basij Road, Semnan, Iran
City
Semnan
Grant name

دانشگاه علوم پزشكي سمنان- دانشكده توانبخشي

Grant code / Reference number
278

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 of Medical Sciences

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Position
Dean of faculty of Rehabilitation

Other areas of specialty/work

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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