

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Sep 2026

The effects of bilateral simulated knee flexion contracture on postural stability in elderly

Protocol summary

Summary

The aim of this study was to investigate the effects of simulated knee flexion contracture on postural stability in elderly. inclusion critria: age of 60 or older; no history of fall even for once even last year; normal or corrected vision; no contractures in both lower limbs; no history of in surgry lower extrimity or joint replacement Exclusion critria: acute and subacute neuromuscular or orthopedic disease; prespective- cognitive impairment with mini mental status assessment questionnaire score of 24 or less. 15 elderly persons (11 men,4 women) participated in this study. Intervention: Postural stability at 0 and 30 degree of knee joints was evaluated by utilization of two rehabilitation knee braces (adaptable knee range of motion control brace). In 0 degree, braces did not cause any constraint for knee joints. in 30 degree, knee contracture were simulated so knee joints were in 30 degree flexion and extension not allowed. postural stability in standing position with eye open and eye close were assessed. test duration was 50 second. any test was in 3 trials and mean of 3 trials was assesed. primary outcome measure for this study was evaluated the postural stability by body center of pressure.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201204089412N1**

Registration date: **2013-06-07, 1392/03/17**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-06-07, 1392/03/17

Registrant information

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Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research and Technology, Ahvaz Jundishapur University of Medical Sciences.

Expected recruitment start date

2011-11-22, 1390/09/01

Expected recruitment end date

2012-01-20, 1390/10/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of bilateral simulated knee flexion contracture on postural stability in elderly

Public title

The effects of bilateral simulated knee flexion contracture on postural stability in elderly

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion critria: age of 60 or older; ability to stand upright for60 second; ability to walk independently and without any assistant device; no history of fall even for once even last year; normal or corrected vision; no

contractures in both lower limbs; no history of in surgery lower extrimity or joint replacement exclusion critria: acute and subacute neuromuscular or orthopedic disease; prespective- cognitive impairment with mini mental status assessment questionnaire score of 24 or less; history of fracture or sprain in lower limbs; vestibular disease such as dissiness.

Age

From **60 years** old to **67 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **15**

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Single

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ahvaz Jundishapour University of Medical Science

Street address

Vice Chancellor for Research, Ahvaz Jundishapour University of Medical Science, Ahvaz City College

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Ahvaz

Postal code

6135749157

Approval date

2011-11-19, 1390/08/28

Ethics committee reference number

pht-90- 11

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

Knee Flexion Contracture

ICD-10 code

M24.5

ICD-10 code description

acquired deformities of limbs

Primary outcomes**1****Description**

Body Center of Pressure

Timepoint

In Time of Test

Method of measurement

path lenght,area, mean velocity , mean velocity AP , mean velocity ML, mean amplitude AP , mean amplitude ML from force plate was recorded

Secondary outcomes

empty

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

in case group, Postural stability by utilization of two rehabilitation knee braces (adaptable knee range of motion control brace) at 0 and 30 degree of knee joints was evaluated . In 0 degree, braces did not cause any constraint for knee joints. in 30 degree, knee contracture were simulated so knee joints were in 30 degree flexion and extension not allowed. postural stability in standing position with eye open and eye close were assessed by a force platform. test duration was 50 second. any test was in 3 trials and mean of 3 trials was assesed.

Category

Diagnosis

Recruitment centers**1****Recruitment center****Name of recruitment center**

Retirement Center of Ahvaz Jundishapour University of Medical Sciences and Shahid Chamran Ahvaz Univ

Full name of responsible person

Majid Amir Zadeh

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Shahid Chamran Ahvaz University

City

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Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Ahvaz Jundishapur University of Medical Sciences, Vice Chancellor for Research

Full name of responsible person

Dr Mostafa Fegghi

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Vice Chancellor for Research, Ahvaz Jundishapour
University of Medical Science, Ahvaz City College

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ahvaz

Grant name

Grant code / Reference number

**Is the source of funding the same sponsor
organization/entity?**

Yes

Title of funding source

Ahvaz Jundishapur University of Medical Sciences, Vice
Chancellor for Research

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

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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