

Clinical Trial Protocol

Iranian Registry of Clinical Trials

03 Jul 2026

Efficacy comparison between virtual reality and its modified form on children with hemiplegic CP

Protocol summary

Summary

The aim of the present study is to improve upper limb performance in children with hemiplegic cerebral palsy. A total of fifteen children with hemiplegic cerebral palsy will be recruited and assigned into the following 3 groups, before the initiation of the intervention. The first group receives virtual reality with restraint that exercises are done with E-Link system, the second group receives only Virtual reality treatment without restraint, and the third group is control group, without any intervention. Measurement sessions are done at the baseline, after the intervention, and three month after the intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201010164945N1**
Registration date: **2011-01-21, 1389/11/01**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2011-01-21, 1389/11/01

Registrant information

Name

Hamid Reza Rostami

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 61 1374 3101

Email address

rostamihr@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Ahvaz Jundishapur University of Medical Sciences

Expected recruitment start date

2010-09-23, 1389/07/01

Expected recruitment end date

2011-03-16, 1389/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Efficacy comparison between virtual reality and its modified form on children with hemiplegic CP

Public title

Efficacy comparison between virtual reality and its modified form on children with hemiplegic CP

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Hemiplegic Children, age between 3 and 10 Year, range of motion: 20 degrees in wrist joint and 10 degrees in MP and IP Joints from full flexion, standing balance Exclusion criteria: Deformity, botulinium Toxin Therapy over 6 months prior to the study, history of seizure over 6 months prior to the study, balance problems

Age

From **4 years** old to **14 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **15**
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
Ahvaz Jundishapur University of Medical Sciences
Street address
Ahvaz
City
Ahvaz
Postal code
Approval date
2010-06-19, 1389/03/29
Ethics committee reference number
U-89071

Health conditions studied

1

Description of health condition studied
cerebral palsy
ICD-10 code
G80.2
ICD-10 code description
Spastic hemiplegic cerebral palsy

Primary outcomes

1

Description
hand function
Timepoint
Baseline and 3 weeks and 3 months after the intervention
Method of measurement
functional test

Secondary outcomes

1

Description
speed and range of motion
Timepoint
Baseline and 3 weeks and 3 months after the intervention
Method of measurement
functional tests

Intervention groups

1

Description
First Group: virtual reality by E-Link system
Category
Rehabilitation

2

Description
Second Group: Virtual Reality by E-Link system with restraint of non involved upper limb
Category
Treatment - Drugs

3

Description
Control group: no intervention
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Ahvaz Hospitals
Full name of responsible person
Street address
City
Ahvaz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Ahvaz Jundishapur University of Medical Sciences
Full name of responsible person
Mrs Jaderi
Street address
Ahvaz Jundishapur University of Medical Sciences
City
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

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**

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Hamid Reza Rostami

Position

Msc

Other areas of specialty/work**Street address**

School of Rehabilitation Sciences

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Full name of responsible person

Hamid Reza Rostami

Position**Other areas of specialty/work****Street address****City**

Ahvaz

Postal code**Phone****Fax****Email****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