

Clinical Trial Protocol

Iranian Registry of Clinical Trials

02 Jul 2026

The effect of fourteen session of Hippotherapy on Balance. Reaction Time and Gait Cycle in Autism Spectrum Disorder

Protocol summary

Summary

The purpose of this research is to evaluate the effect of Hippotherapy intervention on Static Balance, Dynamic Balance, Reaction Time and Gait Cycle on Autism Spectrum Disorder. In a unicentral clinical trial, 24 male patients with Autism Spectrum Disorder referring to the Mehregan private Occupational therapy clinic, Tehran, Iran, would be involved. The key inclusion criteria are: to be 7-18 years old and having no physical disability and the key exclusion criteria are: using other activities and physical treatment methods, Cardiovascular and Respiratory diseases and Absence during the Hippotherapy session. All pre-test variables including: measuring the Static Balance with Stork test, Balance Board for Dynamic Balance evaluation, Nelson's Ruler facilitated test for measuring Reaction Time and Gait Cycle evaluation and walking on a 10-meter line to observe the sole trace and recording the time by chronometer, would be done. Afterward, they were randomly categorized into 2 groups of examination and control (n=12). The experimental group were participated in one 60-90 minute sessions of Hippotherapy for 14 successive weeks, which were intensified over time. whereas, The control group has done no specific practice during the research. Gathered data for pre and post treatment measures will be compared to draw a conclusion.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016071728966N1**
Registration date: **2016-10-09, 1395/07/18**
Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-10-09, 1395/07/18

Registrant information

Name

Sara Mirzabeigi Fini

Name of organization / entity

Islamic Azad University Islamshahr Branch

Country

Iran (Islamic Republic of)

Phone

+98 21 2676 1557

Email address

sarafini@iaau.ac.ir

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2015-04-21, 1394/02/01

Expected recruitment end date

2015-05-22, 1394/03/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of fourteen session of Hippotherapy on Balance. Reaction Time and Gait Cycle in Autism Spectrum Disorder

Public title

Hippotherapy is an innovative approach for enhancing the physical factor of people who suffer from Autism Spectrum Disorder

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:(recognition of Autism Spectrum Disorder by Physiologist and Occupational therapy and having the medical report, having no record of Epilepsy, Orthopedic, Cardiovascular, and Respiratory diseases, using no other treatment or Physical therapy or Hippotherapy; having confirmation of Psychotherapist and the family). Exclusion criteria:(Absence during the Hippotherapy session, using other treatment methods such as: Physical or Sport activities.

Age

From **7 years** old to **18 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **24**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee in research of Islamic Azad University Tehran Medical Branch

Street address

Tehran Medical Branch , Islamic Azad UniversityT, khaghani st, shariati Ave , Tehran, Iran

City

Tehran

Postal code

1916893813

Approval date

2016-08-16, 1395/05/26

Ethics committee reference number

IR.IAU.TMU.REC.1395.124

Health conditions studied

1

Description of health condition studied

Autism Spectrum Disorder

ICD-10 code

F84.1

ICD-10 code description

A type of pervasive developmental disorder that differs from childhood autism either in age of onset or in failing to fulfil all three sets of diagnostic criteria. This subcategory should be used when there is abnormal and impaired development that is pre

Primary outcomes

1

Description

Static Balance

Timepoint

Befor starring the Hippotherapy programm and then after 14 weeks

Method of measurement

The stork test

2

Description

Dynamic Balance

Timepoint

Befor starring the Hippotherapy programm and then after 14 weeks

Method of measurement

Balance Board

3

Description

Reaction Time

Timepoint

Befor starring the Hippotherapy programm and then after 14 weeks

Method of measurement

Nelson's Ruler facilitated test

4

Description

Gait Cycle(Duration of Gait Cycle, The Number of Step, Speed of Step, Length of Step)

Timepoint

Befor starring the Hippotherapy programm and then after 14 weeks

Method of measurement

Observing the sole trace and recorded by Digital camera and chronometer

Secondary outcomes

empty

Intervention groups

1

Description

The Experimental groups were considered as one 60-90 minute sessions for 14 successive weeks of Hippotherapy program. in fact The word Hippotherapy is the usage of horses in the therapy process. The amazing communication ability of horses with human kind and the movement of horse's basin in walking which is in fact a stimulation of basin movement in human are truly effective in the recovery process of different Mental and Physical illnesses

Category

Treatment - Other

2

Description

The Control groups has not been part of any treatment or physical activities during 14 weeks of Hippotherapy session.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Mehregan Rehabilitation Clinic

Full name of responsible person

Naser Najaron

Street address

Unit 1, No. 65, Corner of Ghandahari street, West Nosrat st, Khosh street, Tohid Square

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Investigator

Full name of responsible person

Sara Mirzabeigi Fini

Street address

unit 3, No. 47, Bostan 6 alley, intersection of Sarv, Saadat Abad

City

Tehran

Grant name

شخصی

Grant code / Reference number

Personal

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

Yes

Title of funding source

Investigator

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

Islamic Azad University Islamshahr Branch

Full name of responsible person

Sara Mirzabeigi Fini

Position

Masters physical education and sport science/ member of education and research committee of equestri

Other areas of specialty/work

Street address

Islamshar, Namaz sq, Syad Shirazi st, Islamic Azad University

City

Tehran

Postal code

۳۳۱۴۷ - ۶۷۶۵۳

Phone

+98 21 5635 8105

Fax

+98 21 5635 8106

Email

info@iiau.ac.ir

Web page address

<http://iiau.ac.ir/fa>

Person responsible for scientific inquiries

Contact

Name of organization / entity

Faculty member and Director of Masters Physical Education and Sport Science

Full name of responsible person

Yasser kazem zadeh

Position

Doctor of Sport Physiology

Other areas of specialty/work

Street address

Islamshar, Namaz sq, Syad Shirazi st, Islamic Azad University

City

Tehran

Postal code

1998995557

Phone

+98 21 5635 8105

Fax

+98 21 5635 8106

Email

<http://iaau.ac.ir/fa>

Web page address

<http://iaau.ac.ir/fa>

Person responsible for updating data

Contact

Name of organization / entity

Islamic Azad University Islamshahr Branch

Full name of responsible person

Sara Mirzabeigi Fini

Position

Masters physical education and sport science/
Member of Education and Research Committee of
Equestri

Other areas of specialty/work

Street address

Islamshar, Namaz sq, Syad Shirazi st, Islamic Azad
University

City

Tehran

Postal code

1998995557

Phone

+98 21 5635 8105

Fax

+98 21 5635 8106

Email

info@iaau.ac.ir

Web page address

<http://iaau.ac.ir/fa>

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