Clinical Trial Protocol
Iranian Registry of Clinical Trials

13 Jul 2026

The effect of kinesio tape on spasticity, range of motion, balance and functional mobility in children with cerebral palsy and spastic quadriplegies

Protocol summary

Summary

30 children with cerebral palsy of 4 to 10 years were selected randomly and divided into two groups of 15 intervention and control groups. It should be noted that selected children have the ability to walk and mentally capable of receiving and executing orders. The intervention group, in addition to the usual physical therapy and occupational therapies, also received kinesio tape, but the control group received the sham and received the usual services of physiotherapy and occupational therapy according to the past, ie the type without affecting the person was symbolic be pasted.Taping in the ankle and in the anterior tibialis muscle to improve the ankle flexion dorsi, gastrosulosis, in order to control the ankle plantar flexion, rectus femoris, in order to improve knee extension and hamstring to control flexion of the knee. For this purpose, tension is applied to facilitate muscle function from the beginning to the end of the muscle, but in the case of inhibition of the muscle, from the end to the beginning of the muscle, and for muscle tuning up to 30% of the initial length, and in case of functional correction, it will be drawn up to 100% of the initial length. The position of the child during placement of the tape should be such that the muscle is drawn. Taping is done for 14 days and is replaced by a 4 day interval. Before taping,two days after the taping and the next 14 days (at the end of the intervention), tests and measurements are performed and the results are compared. In this study, the dorsi and knee flexural distance and ankle and knee flexion are measured and recorded, spasticity is assessed by Modified Modified Ashworth Scale, and the degree of each sample is recorded. The functional balance of the child is assessed by the Berg balance test. Forward functional reach measures the individual's balance when standing next to the wall and extending his hand. The child's functional mobility is evaluated by Timed get up and go tests and the results are recorded. The data is entered into the spss and will be analyzed.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017082135822N1**
Registration date: **2017-09-19, 1396/06/28**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-09-19, 1396/06/28

Registrant information

Name
Mirjavad Tabatabaee Yamchi
Name of organization / entity
Iran University of Medical Sciences
Country
Iran (Islamic Republic of)
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Recruitment status

Recruitment complete

Funding source

Baqiyatallah University of Medical Sciences

Expected recruitment start date

2017-09-09, 1396/06/18

Expected recruitment end date

2017-09-19, 1396/06/28

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of kinesio tape on spasticity, range of motion, balance and functional mobility in children with cerebral palsy and spastic quadriplegies

Public title

The effect of kinesio tape on children with cerebral palsy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 1. spastic diplegia or quadriplegia cerebral palsy children who have been taken by a neurologist, are enrolled; 2- children with cerebral palsy physically and mentally at least to be able to walk and to understand and execute commands; 3- children with cerebral palsy should be between 4 to 10 years; 4- no therapies will be added to the usual therapeutic physiotherapy and occupational therapy of the children studied during this period; 5- children who can come to the clinic once every 4 days have to replace the tape. Exclusion criteria: 1. added new plan that received conventional treatment; 2. if the child is allergic to the tape, the child will be excluded from the intervention; 3. if the child does not come to change the tape and distance between the two time tapping, the child will be excluded from the study.

Age

From **4 years** old to **10 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Baqiyatallah University of Medical Sciences

Street address

Baqiyatallah University of Medical Sciences, Sheikh Bahaie Street, End of Nostrad Nusrat

City

Tehran

Postal code

1435916471

Approval date

2017-05-05, 1396/02/15

Ethics committee reference number

IR.BMSU.REC.1396.47

Health conditions studied

1

Description of health condition studied

Cerebral palsy

ICD-10 code

G80

ICD-10 code description

Cerebral palsy

Primary outcomes

1

Description

Functional balance

Timepoint

14 day

Method of measurement

Forward functional reach

2

Description

Balance

Timepoint

14 day

Method of measurement

Berg balance scale

Secondary outcomes

1

Description

Range of motion

Timepoint

14 day

Method of measurement

Goniometry

2

Description

Spasticity

Timepoint

14 day

Method of measurement

Modified Modified Ashworth

3

Description

Functional mobility

Timepoint

14 day

Method of measurement

Timed get up and go

Intervention groups

1

Description

Control group received the sham and received the usual services of physiotherapy and occupational therapy according to the past, ie the type without affecting the person was symbolic be pasted.Taping in the ankle and in the anterior tibialis muscle to improve the ankle flexion dorsi, gastrosulosis, in order to control the ankle plantar flexion, rectus femoris, in order to improve knee extension and hamstring to control flexion of the knee.

Category

Placebo

2

Description

The intervention group, in addition to the usual physical therapy and occupational therapies, also received kinesio tape.Taping in the ankle and in the anterior tibialis muscle to improve the ankle flexion dorsi, gastrosulosis, in order to control the ankle plantar flexion, rectus femoris, in order to improve knee extension and hamstring to control flexion of the knee. For this purpose, tension is applied to facilitate muscle function from the beginning to the end of the muscle, but in the case of inhibition of the muscle, from the end to the beginning of the muscle, and for muscle tuning up to 30% of the initial length, and in case of functional correction, it will be drawn up to 100% of the initial length. The position of the child during placement of the tape should be such that the muscle is drawn. Taping is done for 14 days and is replaced by a 4 day interval. Before taping,two days after the taping and the next 14 days (at the end of the intervention), tests and measurements are performed and the results are compared. In this study, the dorsi and knee flexural distance and ankle and knee flexion are measured and recorded, spasticity is assessed by Modified Modified Ashworth Scale, and the degree of each sample is recorded. The functional balance of the child is assessed by the Berg balance test. Forward functional reach measures the individual's balance when standing next to the wall and extending his hand.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Tavanafarin rehabilitation Center

Full name of responsible person

Mojgan Kabki

Street address

Floor 4, No.168, Next to the gas station, Opposite the Niroye-havayi of metro station, Piroozi Street

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Baqiyatallah University of Medical Sciences

Full name of responsible person

Alireza Shamsoddini

Street address

Sport Physiology Research Center, Baqiyatallah University of Medical Sciences, Sheikh Bahaie Street

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Baqiyatallah 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

Tavan Afarin Rehabilitation center

Full name of responsible person

Mirjavad Tabatabaee Yamchi

Position

MA occupational therapy

Other areas of specialty/work

Street address

Floor 4, No.168, Next to the gas station, Opposite the

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Person responsible for scientific inquiries

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Mirjavad Tabatabaee Yamchi

Position

MA occupational therapy

Other areas of specialty/work

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Person responsible for updating data

Contact

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Other areas of specialty/work

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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