

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### The effect of kinesiotaping on the plantar arch index among 2-6 years old spastic diplegic children with cerebral palsy

#### Protocol summary

##### Study aim

Identifying the effect of kinesiotaping on the plantar arch index among 2-6 years old spastic diplegic children with cerebral palsy

##### Design

The study clinical trial and not blinded and of 20 patients is randomly will divide into 2 groups. The groups are parallel. The trial phase is 3

##### Settings and conduct

Candidates cerebral palsy in Sepehr occupational therapy center are divided into 2 groups by simple randomization with envelopes. The study is not blind.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Having diplegic spastic cerebral palsy, ages 2-6 years Exclusion criteria: Dissatisfaction

##### Intervention groups

The control group will benefit from ordinary rehabilitation exercises to reduce their flat feet deformity, while the intervention group will receive kinesiotaping beside the ordinary exercises. Both groups will be evaluated before and after the study( after 4 months).

##### Main outcome variables

plantar arch index

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20190214042710N1**

Registration date: **2021-05-15, 1400/02/25**

Registration timing: **registered\_while\_recruiting**

Last update: **2021-05-15, 1400/02/25**

Update count: **0**

##### Registration date

2021-05-15, 1400/02/25

#### Registrant information

##### Name

Mohammad Karim Golnari

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 24 3377 3234

##### Email address

mohamad.3602@zums.ac.ir

#### Recruitment status

##### Recruitment complete

#### Funding source

##### Expected recruitment start date

2021-04-21, 1400/02/01

##### Expected recruitment end date

2022-04-21, 1401/02/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

#### Scientific title

The effect of kinesiotaping on the plantar arch index among 2-6 years old spastic diplegic children with cerebral palsy

#### Public title

The effect of kinesiotaping on the plantar arch index

#### Purpose

Treatment

#### Inclusion/Exclusion criteria

##### Inclusion criteria:

Diplegia cerebral palsy Age 2 to 6 years

##### Exclusion criteria:

Dissatisfaction

#### Age

From **2 years** old to **6 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked***No information***Sample size**Target sample size: **20****Randomization (investigator's opinion)**

Randomized

**Randomization description**

Simple individual randomization with random allocation with envelopes in 2 groups A and B . In this method, we selected a number of cards or letters as an intervention group and the same number of cards for the control group, then the cards were merged. One card was taken out and its allocation was registered and the card was returned to the other cards after leaving. Then the cards are merged again and we remove another card. This process continues to reach a random sequence according to sample size.

**Blinding (investigator's opinion)**

Not blinded

**Blinding description****Placebo**

Not used

**Assignment**

Other

**Other design features****Secondary Ids**

empty

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

Ethics committee of Zanjan University of Medical Sciences

**Street address**

Occupational therapy department, School of paramedical sciences, Parvin Etesami Blvd

**City**

Zanjan

**Province**

Zanjan

**Postal code**

4515786349

**Approval date**

2018-03-06, 1396/12/15

**Ethics committee reference number**

IR.ZUMS.REC.1396.312

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

cerebral palsy

**ICD-10 code**

G80.1

**ICD-10 code description**

Spastic diplegic cerebral palsy

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

plantar arch index

**Timepoint**

at the start and the end of the study( after 4 months)

**Method of measurement**

Staheli method

**Secondary outcomes**

empty

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

Control group: Common plantar flattening exercises were used. Common exercises performed in the control group include: 1. Walking with the outer edge of the legs, 2. Walking in a T-shape so that the front leg rotates inwards horizontally when walking, 3. The person sits and places his or her legs with the knee in full extension. And at the same time stretch the gastrocnemius muscle by bringing his hands to the toe, 4. standing with the inverted foot, 5. walking on the heel, 6. standing on the wall to stretch the muscles of the back leg, 7. Walking with the heel cycle, the outer edge and getting up on the toe, 8. Getting up on the toe with the supine foot, 9. Drawing a circle with the toes of both feet while sitting, 10. The person is standing on the stairs with his toes on Stand out from the edge of the stairs, at which point the person tries to bend their fingers. Exercises are done for 4 months.

**Category**

Treatment - Other

**2****Description**

Intervention group: In addition to the mentioned exercises, kinesiotyping (Stretching exercises for shortened muscles and strengthening exercises for weak muscles) method was used. Stretching exercises included exercises to stretch the short fibularis muscles, long fibularis gastrocnemius, and strengthening exercises included strengthening the posterior and anterior tibialis muscles, the soleus muscles, and the flexor muscles of the toes.Exercises are done for 4 months.

**Category**

Treatment - Other

## Recruitment centers

1

### Recruitment center

**Name of recruitment center**

Sepehr occupational therapy center

**Full name of responsible person**

Mohammad Karim Golnari

**Street address**

No. 20, Alborz Bldg, Ghaleh Ave, Saadi St

**City**

Zanjan

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**Postal code**

4513954215

**Phone**

+98 24 3332 6176

**Email**

mohamad.3602@gmail.com

## Sponsors / Funding sources

1

### Sponsor

**Name of organization / entity**

Zanjan University of Medical Sciences

**Full name of responsible person**

Dr. Alireza Shoghli

**Street address**

Azadi Square, Zanjan

**City**

Zanjan

**Province**

Zanjan

**Postal code**

45154

**Phone**

+98 24 3342 0651

**Email**

research@zums.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Zanjan University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

Public

**Domestic or foreign origin**

Domestic

**Category of foreign source of funding**

empty

**Country of origin**

**Type of organization providing the funding**

Academic

## Person responsible for general inquiries

### Contact

**Name of organization / entity**

Zanjan University of Medical Sciences

**Full name of responsible person**

Mohammad Karim Golnari

**Position**

faculty member

**Latest degree**

Master

**Other areas of specialty/work**

Occupational Therapy

**Street address**

occupational therapy department, Paramedical science school, Parvin Etesami Blvd

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**Province**

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## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Zanjan University of Medical Sciences

**Full name of responsible person**

Mohammad Karim Golnari

**Position**

faculty member

**Latest degree**

Master

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## Person responsible for updating data

### Contact

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**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**Study Protocol**

Yes - There is a plan to make this available

**Statistical Analysis Plan**

Undecided - It is not yet known if there will be a plan to make this available

**Informed Consent Form**

Yes - There is a plan to make this available

**Clinical Study Report**

Yes - There is a plan to make this available

**Analytic Code**

Undecided - It is not yet known if there will be a plan to make this available

**Data Dictionary**

Not applicable

**Title and more details about the data/document**

All the data will be potentially accessible after making the identification of cases unrecognizable.

**When the data will become available and for how long**

6 months after the conclusion publication

**To whom data/document is available**

Researchers working in universities and scientific centers

**Under which criteria data/document could be used**

Using for rehabilitation and medical studies will be allowed

**From where data/document is obtainable**

Please ask your request using the following email address mohamad.3602@gmail.com Mohammad Karim Golnari

**What processes are involved for a request to access data/document**

They must send their request via email and expect the response in about 2 weeks.

**Comments**