Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

EFFECTS OF 8 WEEKS FUNCTIONAL TRAINING PROGRAM IN POSTURE CONTROL AND FUNCTIONAL MOBILITY IN SPASTIC HEMIPLEGIC CEREBERAL PALSY

Protocol summary

Study aim
To find out effects of functional training vs conventional training on posture control and functional mobility in spastic hemiplegic cerebral palsy

Design
Randomized clinical trial

Settings and conduct
Rehab cure Lahore

Participants/Inclusion and exclusion criteria
Inclusion Criteria: Children diagnosed with cerebral palsy. Ages between 4 to 14 years. Children with gross motor functional classification system (GMFCS) level II or lll. Children with no mental retardation.The degree of spasticity according to Modified Ashworth Scale between grade 1 to 3 Exclusion Criteria: Children who had orthopedic surgery or used Botulinum toxin injection. Children with severe visual defect. Children having auditory problems. Children having vestibular issues. Children with severe understanding problems. Parents of children who didn't want to participate in study

Intervention groups
Subjects will receive 8 weeks treatment 3 times a week. session will be of 45 mints to 1 hour. Group A will receive conventional training program consist on TENS, hot pack, ROMs, stretching, bridging , balance training, supine to sit exercise, diagonal pattern ex with resistance, lateral walk, step ups, gait training, sit to stand, stair climbing, single leg standing, weight shift, cat position Group B will receive functional training program consist on Gym ball exercises, ex with resistance bands, unilateral pelvic bridging, Bosu ball ex , trampoline jumping, resistance kneeling, Treadmill walk, squats, cycling, cat walk, back walk, stepper ex, stair climbing

Main outcome variables
Pediatric Balance scale , Trunk control measurement scale, Five Times Sit to Stand Test, Timed Up and Go

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20200909048676N1**
Registration date: **2020-11-24, 1399/09/04**
Registration timing: **retrospective**

Last update: **2020-11-24, 1399/09/04**
Update count: **0**

Registration date
2020-11-24, 1399/09/04

Registrant information

Name
Aeysha Gulzar
Name of organization / entity
Riphah International University
Country
Pakistan
Phone
+92 42 35126110
Email address
ash.gul2012@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-09-15, 1399/06/25

Expected recruitment end date
2020-11-15, 1399/08/25

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date

empty

Scientific title
EFFECTS OF 8 WEEKS FUNCTIONAL TRAINING PROGRAM IN POSTURE CONTROL AND FUNCTIONAL MOBILITY IN SPASTIC HEMIPLEGIC CEREBERAL PALSY

Public title
EFFECTS OF 8 WEEKS FUNCTIONAL TRAINING PROGRAM IN POSTURE CONTROL AND FUNCTIONAL MOBILITY IN SPASTIC HEMIPLEGIC CEREBERAL PALSY

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Children diagnosed with cerebral palsy Ages between 4 to 14 years Children with gross motor functional classification system (GMFCS) level II or lll Children with no mental retardation The degree of spasticity according to Modified Ashworth Scale ranged between grade 1 to 3

Exclusion criteria:
Children who have had orthopedic surgery or Botulinum toxin injection Children with severe visual defect Children having auditory impairment Children having vestibular problem Children with severe perceptual deficit. Parents of children who don't want to participate in study

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

Gender
Both

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **14**

Randomization (investigator's opinion)
Randomized

Randomization description
Randomization by lottery method. Allocation concealment through sealed envelope

Blinding (investigator's opinion)
Single blinded

Blinding description
Participants will be blinded

Placebo
Not used

Assignment
Parallel

Other design features
Non probability convenient sampling will be used to recruit the individuals for the study. Randomization will be done by lottery method to divide the individuals to 2 treatment groups. sealed envelop will be used for allocation concealment.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Riphah College of Rehabilitation & Allied health Sciences

Street address
Madar-e-Millat Road, Quaid-e-Azam Industrial Estate.

City
Lahore

Postal code
54770

Approval date
2020-01-01, 1398/10/11

Ethics committee reference number
RCRS-RE-MS-NMPT/FALL 19/026

Health conditions studied

1

Description of health condition studied
Spastic Hemiplegic Cerebral Palsy

ICD-10 code
G80.2

ICD-10 code description
Spastic hemiplegic cerebral palsy

Primary outcomes

1

Description
Postural control and functional mobility

Timepoint
Total 8 week program and no follow up. Primary outcome will be measured on 8th week

Method of measurement
Pediatric Balance scale, Trunk control measurement scale, Five Times Sit to Stand Test , Timed Up and Go

Secondary outcomes

empty

Intervention groups

1

Description
Subjects will receive 8 weeks treatment 3 times a week. session will be of 45 mints to 1 hour. Group A will receive conventional training program consist on TENS, hot pack, ROMs, stretching, bridging , balance training, supine to sit exercise, diagonal pattern ex with resistance, lateral walk, step ups, gait training, sit to stand, stair climbing, single leg standing, weight shift, cat position

Category
Treatment - Other

2

Description
Intervention group: Subjects will receive 8 weeks treatment 3 times a week. session will be of 45 mints to 1 hour. Group B will receive functional training program consist on Gym ball exercises, ex with resistance bands, unilateral pelvic bridging, Bosu ball ex , trampoline jumping, resistance kneeling, Treadmill walk, squats, cycling, cat walk, back walk, stepper ex, stair climbing

Category
Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Rehab cure Lahore

Full name of responsible person
Aeysha Gulzar

Street address
Madar-e-Millat Road, Quaid-e-Azam Industrial Estate.

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Lahore

Postal code
54770

Phone
+92 42 35126110

Email
ash.gul2012@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Riphah International University

Full name of responsible person
Prof. Dr. Anis Ahmad

Street address
Madar-e-Millat Road Quaid e Azam Industrial Estate

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54770

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+92 42 35126110

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ash.gul2012@gmail.com

Grant name

Grant code / Reference number

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

Title of funding source
Riphah International University

Proportion provided by this source
100

Public or private sector
Private

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
Riphah International University

Full name of responsible person
Aeysha Gulzar

Position
Student

Latest degree
Master

Other areas of specialty/work
Physiotherapy

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Madar-e-Millat Road, Quaid-e-Azam Industrial Estate

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Person responsible for scientific inquiries

Contact

Name of organization / entity
Riphah International University

Full name of responsible person
Aeysha Gulzar

Position
Student

Latest degree
Master

Other areas of specialty/work
Physiotherapy

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Person responsible for updating data

Contact

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Riphah International University

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD
there is no further decision and information decided yet

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

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