Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effect of Deep cross-friction message and Reciprocal inhibition among patients having spastic cerebral palsy

Protocol summary

Study aim
To find out the efficacy of Deep Cross-Friction Massage versus Reciprocal Inhibition on spasticity in cerebral palsy patients

Design
A Randomized, blinded clinical trial with parallel group design of 30 patients

Settings and conduct
The settings in which this study going to conduct is Pakistan Society for Rehabilitation of differently disabled and rising sun institute

Participants/Inclusion and exclusion criteria
Inclusion criteria: • Cerebral palsy patients both male and female.(Zhang and Xiong., 2021) • Age between 2 and 10 years.(Mahmood and Habibullah., 2020) • Muscle tone between I-IV (according to newly revised Ashworth scale)(Zhang and Xiong ., 2021) Exclusion criteria: • Organized diseases involving other organs such as heart, liver, and kidney. • Exclusion of leukodystrophy, infantile spinal muscular atrophy, genetic metabolic diseases such as phenylketonuria, congenital cretinism, and congenital hydrocephalus.

Intervention groups
• Techniques will be administered in two groups. • Group A for reciprocal inhibition and Group B for deep cross-friction massage. • Baseline treatment will include hot pack for 15 minutes and TENS for 20 minutes having intensity between 35 and 50 Hz. • Techniques will be applied for 3 days a week and a single session duration will be 20 minutes. • Total duration will be 4 weeks.

Main outcome variables
Spasticity

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20210326050770N1**
Registration date: **2023-04-27, 1402/02/07**
Registration timing: **prospective**

Last update: **2023-04-27, 1402/02/07**
Update count: **0**

Registration date
2023-04-27, 1402/02/07

Registrant information

Name
Mohammad Abbas Jamil

Name of organization / entity
Rashid latif medical college

Country
Pakistan

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+92 49 4510915

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m.abbas@rlmc.edu.pk

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-04-30, 1402/02/10

Expected recruitment end date
2023-07-30, 1402/05/08

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Effect of Deep cross-friction message and Reciprocal inhibition among patients having spastic cerebral palsy

Public title
Effect of Deep cross-friction message and Reciprocal

inhibition among patients having spastic cerebral palsy

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Cerebral palsy patients both male and female.(Zhang and Xiong., 2021) Age between 2 and 10 years.(Mahmood and Habibullah., 2020) Muscle tone between I-IV (according to newly revised Ashworth scale)(Zhang and Xiong2021)

Exclusion criteria:
Organized diseases involving other organs such as heart, liver, and kidney. Exclusion of leukodystrophy, infantile spinal muscular atrophy, genetic metabolic diseases such as phenylketonuria, congenital cretinism, and congenital hydrocephalus.

Age
From **2 years** old to **10 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Participant

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description
Allocation of patients in two equal groups by lottery method will be through random assignment. Patients were allocated into two groups i.e.; Group A and Group B, by lottery method. Lottery method is a type of simple random sampling. In this method, each participant of the trial is assigned a unique number. 60 cards were placed in a basket and thoroughly mixed. The slips are taken out randomly without looking at them and are placed into two sets. Total of 30 cards were taken out, 15 participants in each group.

Blinding (investigator's opinion)
Single blinded

Blinding description
The blinding is achieved by concealment in which the treatment allocation for each patient is not revealed to the patient. This is done to avoid biasness

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Institutional Board of Rashid Latif Medical College

Street address
35-Km Ferozepur road Lahore

City
Lahore

Postal code
54600

Approval date
2022-09-02, 1401/06/11

Ethics committee reference number
IRB/2022/040

Health conditions studied

1

Description of health condition studied
Spastic Cerebral Palsy

ICD-10 code
G80

ICD-10 code description
Cerebral palsy

Primary outcomes

1

Description
Spasticity

Timepoint
4 weeks

Method of measurement
Modified Ashworth scale

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group:

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Pakistan Society for Rehabilitation of Differently Abled

Full name of responsible person
Tanzeela Javeed

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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Rashid Latif Medical College
Full name of responsible person
Abbas Jamil
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Rashid Latif Medical College
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
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Physiotherapist
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

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